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DRAFT ADDENDUM 1
REMEDY EVALUATION REPORT FOR THE
KERR-McGEE CHEMICAL CORPORATION SUPERFUND SITE
TRONOX FACILITY SODA SPRINGS, IDAHO
APPENDICES A, B, C

March 1, 2009

Prepared by:

GLOBAL ENVIRONMENTAL TECHNOLOGIES L.L.C.

SALT LAKE CITY, UTAH

APPENDIX A

DRAFT ADDENDUM 1

REMEDY EVALUATION REPORT FOR THE KERR-McGEE CHEMICAL CORPORATION SUPERFUND SITE TRONOX FACILITY SODA SPRINGS, IDAHO

APPENDIX A – REMEDY SITE INSPECTION

February 25, 2009

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APPENDIX A – REMEDY SITE INSPECTION

Appendix A presents details pertaining to the on-site inspection of the closed ponds and other elements of the remedy that were completed in 2001. The results of the inspection and a photo log are also contained in this appendix. Prior to performing the inspection of the landfill and cap, the monitoring logs were reviewed.

A.1 S-X Pond

The inspection of the S-X pond took place between July 17 and August 6, 2008. Results of the inspection are summarized on Figure A-1. The entire grid was first established and then inspection was initiated. The purpose of the inspection of the covered S-X pond was to observe erosion, evidence of burrowing animals, evidence of standing water and the presence of deep-tap rooted plants that could aid in the infiltration of snow melt water through the vadose zone. The inspection was accomplished by establishing a 50-foot by 50-foot grid over the former pond surface. This grid was established using a compass and tape. Stakes with flagging were placed on the outside of the pond boundaries and additional stakes were placed within the pond limits to aid the field engineer to ensure that the field engineer stayed on the proper grid line.

There were 17 lines established oriented east-west, starting at the south boundary of the former pond. Points were established on each line at 50-foot intervals. Point 1 of each line occurred on the east terminus of the line. The line that intersected each of the points on the lines created the north-south line of the grid. The intersection of each grid line was located using a Garmin Colorado 400t hand-held GPS. The grid was established at the southeast corner of the pond area.

Line 1 was set up outside the pond limits on the south. A total of seventeen lines were set up at 50 foot intervals in a northerly direction. Line 17 is outside the of the former pond limit on the north side of the pond. Points were established along each line at 50 foot intervals. Point 1 of each line makes up the eastern most boundary of the inspection area. Stakes with flagging were placed at 50 foot intervals along Line 1 and at Point 1 of each line in a northerly direction. Additional stakes with flagging were put at each point of Lines 5, 9, 13 and 17 to ensure the correct orientation for the field engineer.

The latitude and longitude coordinates of each intersection of the grid lines is shown in Table A-1. There are 8 points in line 1 and all of these points are outside the former pond boundary. Due to the irregular shape of the former S-X pond:

- Line 2 has 5 points;
- Lines 3, 4, and 5 each have 6 points;
- Line 6 has 7 points and;
- The remaining lines each have 8 points.

The field engineer walked each east-west line and the north-south line. The field engineer noted any areas that could lead to infiltration of snow melt water as described above. A photo of each area was taken and all of the photos are shown in the photo log that is contained in this appendix. The field engineer also determined the location of each problem area with the Garmin Colorado 400t hand-held GPS. A description of the problem area and the location coordinates (latitude and longitude) are in the caption beneath each photo. The photos from the S-X pond inspection have the heading S-X Pond Photo Log.

The inspection of the uncapped S-X pond resulted in observing several areas that could hold standing water, areas of erosion and a sink hole. The field engineer also noted that the vegetation growing on the former S-X pond was shorter and browner than the same vegetation growing outside of the pond limits, suggesting that the vegetation was stressed.

Areas on the cover that could hold standing water were located in the southern portion of the former pond and along the inside of the former west dike of the pond. Examples of these low lying areas are shown in Photos 2, 3, 4, 5, 7, 9, 15, 16, 18, 20, 21, 26 and 27. These areas ranged in size from a few square feet to more than 100 square feet.

One sink hole was observed within the boundaries of the former pond. The sink hole is near the west dike of the pond in the southern portion of the pond. A number of sink holes were previously observed near monitor well KM-8 during the RI. The sink hole observed during the inspection is approximately 2.5 feet in diameter and 1.5 feet deep. Photo 10 shows this sink hole.

Several areas of erosion and calcine at the ground surface were observed along the east side of the former S-X pond. Examples of these areas are shown in Photos 14, 29, 33 and 34. This is the result of the covered west calcine deposit where the cover is thin or absent and calcine has been exposed. Animal burrowing has also exposed calcine. Several holes dug by burrowing animals were observed during the inspection. It did not appear that the holes were occupied at the time of the inspection. Photos 36, 38, 40 and 41 show examples of the burrowing animal holes observed

A.2 Former Scrubber Pond

The inspection of the scrubber pond took place August 6 through August 9, 2008. Results of the inspection are summarized on Figure A-2. The entire grid was established prior to the inspection. The former scrubber pond was inspected to observe signs of erosion, evidence of burrowing animals, evidence of standing water and deep-tap rooted plants that could aid in the infiltration of snow melt water through the vadose zone. This inspection was accomplished by establishing a 30-foot by 30-foot grid over the former pond surface. This grid was established using a compass and tape. Stakes with flagging were placed on the outside of the pond boundaries and additional stakes were placed within the pond limits to aid the field engineer to ensure that the field engineer stayed on the proper grid line.

Twenty lines were established, oriented north-south starting at the north boundary of the former pond. The chain-link fence along the north edge of the pond was used as the north boundary of the inspection area. Points were established on each line at 30-foot intervals. Point 1 of each line was on the north end of the line (chain-link fence). The line oriented through each of the points on the lines created the east-west line of the grid. The intersection of each grid line was located using a Garmin Colorado 400t hand-held GPS.

The grid was set up by starting at the northwest corner of the pond area. Line 1 was set up outside the pond limits on the west. A total of 20 lines were set up at 30 foot intervals in an easterly direction. Line 20 is outside the of the former pond limit on the east side of the pond. Points were established along each line at 30 foot intervals. Point 1 of each line makes up the northern-most boundary of the inspection area. Stakes with flagging were placed at 30-foot intervals along Line 1 and at Point 1 of each line in an easterly direction. Additional stakes with flagging were placed at each point of the lines at 150 foot intervals to ensure that the field engineer was walking along the correct grid line.

The latitude and longitude coordinates of each intersection of the grid lines are shown in Table A-2. Due to the shape of the former pond there are:

- 4 points along lines 1 through Line 4;
- 5 points along lines 5 through line 7;
- 6 points along lines 8 through line 11;
- 7 points along lines 12 through line 15;

- 6 points along lines 16 through line 17, and;
- 5 points along lines 18 through line 20.

The field engineer walked each east-west line and the north-south line. The field engineer noted any areas that could lead to infiltration of snow melt water as described above. A photo of each area was taken and all of the photos are shown in the photo log that is attached to this appendix. The field engineer also determined the location of each problem area with the Garmin Colorado 400t hand-held GPS. A description of the problem area and the location coordinates (latitude and longitude) are in the caption beneath each photo. The photos from the former scrubber pond inspection have the heading Scrubber Pond Photo Log.

The inspection of the former scrubber pond resulted in observing several areas that could hold standing water, areas of erosion and some vegetation with deep tap roots. The field engineer also noted that the drains from the plant and the scrubber pond area ran through the inspection area and these areas could also promote infiltration of snow melt water into the vadose zone.

The areas that the field engineer observed that could hold standing water were mainly located in the western portion of the former pond basin. The drains associated with the southern infiltration basin also ran through the western portion of the pond basin. Photos 1, 2, 3, 4, 6, 7, 8, 9, 10, 11 and 12 show the areas that could contain water and the drains oriented through the pond area.

One area of erosion was observed during the inspection. This area is located along the southern portion of the pond area. The eastern portion of the pond area is higher in elevation and the erosion appears to have occurred when water ran from east to west. The erosion rill is shown in Photo 17.

Sagebrush was observed growing in several places in the eastern portion of the pond area. This plant has a tap root that can grow deep into the ground. This sagebrush is shown in Photos 17 and 18.

A.3 Limestone Settling Pond Area

The inspection of the limestone settling pond area took place August 10, 2008. Results of the inspection are summarized on Figure A-3. The entire grid was established prior to the inspection. The purpose of the inspection of the limestone settling pond area was to observe signs of erosion, evidence of burrowing animals, evidence of standing water and deep-tap rooted plants that could aid in the infiltration of snow melt water through the vadose zone. This inspection was accomplished by establishing a 50-foot by 50-foot grid over the former pond area. This grid was established using a compass and tape. Stakes with flagging were placed on the outside of the pond boundaries and additional stakes were placed within the pond limits to aid the field engineer and to ensure that the field engineer stayed on the proper grid line.

There were 11 lines established oriented north-south starting at the western boundary of the limestone settling pond area. Points were established on each line at 50-foot intervals. Point 1 of each line was on the north end of the line. The line oriented through each of the points on the lines created the east-west line of the grid. The northern boundary of the inspection area (Point 1 of each line) was the chain link fence oriented along the north portion of the pond area. The chain link fence on the east side of the pond area was the eastern boundary of the inspection area. The intersection of each grid line was located using a Garmin Colorado 400t hand-held GPS.

The grid was set up by starting at the southwest corner of the pond area. Line 1 was set up outside the pond limits on the west. A total of 11 lines were set up at 50 foot intervals in an easterly direction. Line 11 is outside the of the former pond limit on the east side of the pond area. Points were established along each line at 50 foot intervals.

Point 1 of each line makes up the southernmost boundary of the inspection area. Stakes with flagging were placed at 50 foot intervals along Line 1 and at Point 1 of each line in an easterly direction and at Point 5 of each line. Additional stakes with flagging were put at each point of the lines at Lines 5, 9 and 11 to ensure that the field engineer was walking along the correct grid line.

The latitude and longitude coordinates of each intersection of the grid lines is shown in Table A-3. The inspection area was rectangular and each line contains 5 points.

The field engineer walked each east-west line and the north-south line. The field engineer noted any areas that could lead to infiltration of snow melt water as described above. A photo of each area was taken and all of the photos are shown in the photo log that is attached to this appendix. The field engineer also determined the location of each problem area with the Garmin Colorado 400t hand-held GPS. A description of the problem area and the location coordinates (latitude and longitude) are in the caption beneath each photo. The photos from the limestone settling pond area inspection have the heading Limestone Settling Pond Photo Log.

The inspection of the limestone settling pond area resulted in observing two areas of standing water, several areas of erosion, several areas that are un-vegetated, evidence of burrowing animal activity and some deep tap-rooted vegetation. The field engineer also noted that the areas of standing water were supporting wetland vegetation including cattails.

The two areas of standing water appear to be connected and the source of the water feeding these areas could be the pipeline used to transport S-X raffinate from the plant when the plant was operating, or a pipe that handled storm water from the former plant. This could not be confirmed during the inspection. Photos 4, 5, 15 and 16 show these areas that hold standing water.

The areas of erosion are along the western, southern and northern portions of the area. The area slopes to the west in most locations and to the southwest along the southern edge of the area. The areas of erosion are shown in Photos 1, 10, 11and 18. There are several un-vegetated areas in the inspection area that border the areas of erosion. These un-vegetated areas are shown in Photos 7, 8, 13, 14 and 19.

The evidence of burrowing animal activity is shown in photos 2, 9 and 17. This activity does not appear to be recent and the animals were not seen during the inspection.

The deep tap rooted vegetation observed during the inspection is a member of the thistle family. Photo 6 shows this vegetation.

A.4 On-Site Landfill

The inspection of the landfill cap took place on August 10, 2008. Results of the inspection are summarized on Figure A-4. The entire grid was established and then the inspection took place. The inspection of the on-site landfill was to observe the cover for settling and erosion, evidence of burrowing animals, evidence of standing water and deep-tap rooted plants that could aid in the infiltration of snow melt water through the engineered cap. The logbook that contains the documentation of inspections conducted at the on-site landfill was reviewed. The logbook contains the inspections conducted from May 1999 to the present. The information contained in the logbook includes measurements of the water level in the sump for most of the inspections. Some of the inspections included information on the condition of the vegetation, condition of the soil cover and the condition of the fence. One problem identified during the review was that the inspections were not being conducted (or documented) at the frequency required by the Operation and Maintenance (O&M) Plan. Another problem was that not all of the information required by the O&M Plan was documented for each inspection.

This inspection was accomplished by establishing a 50-foot by 50-foot grid over the landfill cap surface. This grid was established using a compass and tape. Stakes with flagging were placed on the outside of the landfill boundaries and additional stakes were placed within the landfill limits to aid the field engineer to ensure that the field engineer stayed on the proper grid line.

There were 9 lines established oriented east-west starting at the south boundary (chain link fence) of the landfill. Points were established on each line at 50-foot intervals. Point 1 of each line was on the east end of the line (chain link fence). The line oriented through each of the points on the lines created the north-south line of the grid. The intersection of each grid line was located using a Garmin Colorado 400t hand-held GPS.

The grid was set up by starting at the southeast corner of the landfill area. Line 1 was set up outside the landfill limits along the fence on the south. A total of 9 lines were set up at 50 foot intervals in a northerly direction. Line 9 is outside the of the landfill limit on the north side of the landfill area (near the north fence line). Points were established along each line at 50 foot intervals. Point 1 of each line makes up the eastern boundary of the inspection area and is next to the eastern fence. Stakes with flagging were placed at 50 foot intervals along Line 1 and at Point 1 of each line in a westerly direction and at Point 6 of each line. Additional stakes with flagging were put at each point of the lines at Lines 3, 5 and 7 to ensure that the field engineer was walking along the correct grid line. These additional lines were required due to slope of the landfill.

The latitude and longitude coordinates of each intersection of the grid lines is shown in Table A-4. The inspection area was rectangular and each line contains 6 points.

The field engineer walked each east-west line and the north-south line. The field engineer noted any areas that could lead to infiltration of snow melt water as described above or other potential problems. A photo of each area was taken and all of the photos are shown in the photo log contained in this appendix. The field engineer also determined the location of each problem area with the Garmin Colorado 400t hand-held GPS. A description of the problem area and the location coordinates (latitude and longitude) are in the caption beneath each photo. The photos from the on-site landfill inspection have the heading Landfill Photo Log.

The inspection of the landfill resulted in observing several un-vegetated areas that could lead to erosion, evidence of burrowing animal activity and some deep tap rooted vegetation. The field engineer noted that there was no settling on the landfill cover surface or around the sump well.

The un-vegetated areas observed during the inspection were along the south fence line (line 1) and two areas along the west fence. Photos 1, 5, and 8 show these areas.

The evidence of burrowing animal activity is shown in photos 2, 3, 4, 6, 7, and 9. Some of the activity appeared to be old, but one hole looked like it could have been dug this year. However all of these holes were outside the footprint of the landfill.

There is an intrusion of alfalfa and an unidentified deep tap rooted plant on the north side of the landfill but outside of the footprint of the landfill. Photos 10, 11 and 12 show these plants.

A.5 Calcine Cap

The inspection of the calcine cap took place August 16 and 17, 2008. Results of the inspection are summarized on Figure A-5. The entire grid was established prior to the inspection. The calcine cap inspection looked for signs of erosion, evidence of burrowing animals, evidence of standing water or settling and deep-tap rooted plants that could aid in the infiltration of snow melt water through the engineered cap. The logbook that contains the documentation of inspections conducted at the calcine cap was reviewed. The logbook contains documentation of the inspections conducted from January 2002 to the present. Some of the inspections included information on the condition of the vegetation, condition of the soil cover and the condition of the fence. The inspection records from the spring of 2002 identified the erosion on the south side of the cap that was repaired later in 2002. Inspection records for the inspections after the repairs were completed indicate that the repairs were successful. One problem identified during the review was that the inspections were not being conducted at the frequency required by the Operation and Maintenance (O&M) Plan. Another problem was that not all of the information required by the O&M Plan was documented for each inspection.

This inspection was accomplished by establishing a 50-foot by 50-foot grid over the capped area. This grid was established using a compass and tape. Stakes with flagging were placed on the outside of the calcine cap boundaries and additional stakes were placed within the capped area to aid the field engineer to ensure that the field engineer stayed on the proper grid line.

There were 24 lines established oriented east-west starting at the south boundary of the calcine cap area. Points were established on each line at 50-foot intervals. Point 1 of each line was on the east end of the line. The line oriented through each of the points on the lines created the north-south line of the grid. The intersection of each grid line was located using a Garmin Colorado 400t hand-held GPS.

The grid was set up by starting at the southeast corner of the calcine cap area. Line 1 was set up outside the cap limits along the fence on the south. A total of 24 lines were set up at 50 foot intervals in a northerly direction. Line 24 is outside the of the calcine cap limit on the north side of the capped area (near the north fence line). Points were established along each line at 50 foot intervals. Point 1 of each line makes up the eastern boundary of the inspection area and is next to the eastern fence. Stakes with flagging were placed at 50 foot intervals along Line 1 and at Point 1 of each line. Additional stakes with flagging were put at each point of the lines at Lines 5, 9, 13, 17, 21 and 24 to ensure that the field engineer was walking along the correct grid line. These additional lines were required due to slope of the calcine cap.

The latitude and longitude coordinates of each intersection of the grid lines is shown in Table A-5. The shape of the calcine cap dictated that the inspection area would not be rectangular.

The field engineer walked each east-west line and the north-south line. The field engineer noted any areas that could lead to infiltration of snow melt water as described above. A photo of each area was taken and all of the photos are shown in the photo log that is attached to this appendix. The field engineer also determined the location of each problem area with the Garmin Colorado 400t hand-held GPS. A description of the problem area and the location coordinates (latitude and longitude) are in the caption beneath each photo. The photos from the calcine cap inspection have the heading Calcine Cap Photo Log.

The inspection of the calcine cap area resulted in observing several areas of erosion, evidence of burrowing animal activity and some deep tap rooted vegetation. The field engineer noted that no settling of the cap was observed.

There are a few areas of erosion on the south side of the cap. This area had significant erosion following construction, but the damage was repaired and reseeded. The evidence of ongoing erosion is shown in photos 6, 7, and 14.

Numerous holes from burrowing animal activity were observed across the entire calcine cap. Some of this burrowing activity appears to be old, but some of the activity could have occurred in 2008. Examples of the burrowing animal activity observed during the inspection are shown in photos 1, 5, 10, 11, 13, 15, 16, 17 and 18.

Intrusion of deep tap rooted vegetation was observed during the inspection. The intruding species included members of the thistle family on the southern portion of the cap and alfalfa on the northern portion of the cap. Photos 2, 3, 8, 9, 12, 19 and 20 show examples of these deep tap rooted plants.

A.6 MAP Ponds

The inspection of the MAP ponds area took place on September 18, 2008. Results of the inspection are summarized on Figure A-6. The entire grid was established prior to the inspection. The purpose of the inspection of the former MAP pond area was to observe signs of erosion, evidence of burrowing animals, evidence of standing water and deep-tap rooted plants that could aid in the infiltration of snow melt water through the vadose zone. This inspection was accomplished by establishing a 50-foot by 50-foot grid over the former pond surface. This grid was established using a compass and tape. Stakes with flagging were placed on the outside of the pond boundaries and additional stakes were placed within the pond limits to aid the field engineer to ensure that the field engineer stayed on the proper grid line.

There were 4 lines established oriented east-west starting at the south boundary of the former pond. Points were established on each line at 50-foot intervals. Point 1 of each line was on the east end of the line. The line oriented through each of the points on the lines created the north-south line of the grid. The intersection of each grid line was located using a Garmin Colorado 400t hand-held GPS.

The grid was set up by starting at the southeast corner of the MAP pond area. Line 1 was set up outside the MAP pond limits to the south of the ponds and north of the plant access road. A total of 4 lines were set up at 50-foot intervals in a northerly direction. Line 4 is outside the of the MAP pond limit near the warehouse to the north of the former pond area. Points were established along each line at 50 foot intervals. Point 1 of each line makes up the eastern boundary of the inspection area. Stakes with flagging were placed at 50 foot intervals along Line 1 and at Point 1 of each line. Additional stakes with flagging were put at each point of the lines at Lines 2 and 4 to ensure that the field engineer was walking along the correct grid line.

The latitude and longitude coordinates of each intersection of the grid lines is shown in Table A-6. The inspection area was roughly square with 4 lines and 4 points on each line.

The field engineer walked each east-west line and the north-south line. The field engineer noted any areas that could lead to infiltration of snow melt water as described above. A photo of each area was taken and all of the photos are shown in the photo log that is attached to this appendix. The field engineer also determined the location of each problem area with the Garmin Colorado 400t hand-held GPS. A description of the problem area and the location coordinates (latitude and longitude) are in the caption beneath each photo. The photos from the MAP pond inspection have the heading MAP Pond Photo Log.

The inspection of the MAP pond area resulted in observing one area that could hold standing water, areas of erosion and evidence of storm water run-on. The vegetation growing on the pond area was very tall and showed no signs of stress.

The areas of erosion observed were along the north and south boundaries of the pond area. The erosion is occurring because storm water runoff from the plant site flows downhill onto the pond area. The areas affected by the storm water run-on and erosion are shown in photos 1, 3, 6 and 7.

One area that showed evidence of holding water is located near the western edge of the pond area. Water that accumulates in this area could come from snow melt on the surface and storm water run-on from the plant site. This area is shown in photos 2 and 5.

A.7 Former Vanadium Plant

The footprint of the former vanadium plant was inspected to observe signs of erosion, evidence of burrowing animals, evidence of standing water and deep-tap rooted plants that could aid in the infiltration of snow melt water through the vadose zone. This inspection was accomplished by establishing a 50-foot by 50-foot grid over the former plant footprint. This grid was established using a compass and tape. Stakes with flagging were placed on the outside of the plant footprint and additional stakes were placed within the plant area to aid the field engineer to ensure that the field engineer stayed on the proper grid line.

There were 5 lines established oriented east-west starting at the south boundary of the former pond. Points were established on each line at 50-foot intervals. Point 1 of each line was on the west end of the line. The line oriented through each of the points on the lines created the north-south line of the grid. The intersection of each grid line was located using a Garmin Colorado 400t hand-held GPS.

The field engineer walked each east-west line and the north-south line. The field engineer noted any areas that could lead to infiltration of snow melt water as described above. A photo of each area was taken and all of the photos are shown in the photo log that is attached to this appendix. The field engineer also determined the location of each problem area with the Garmin Colorado 400t hand-held GPS. A description of the problem area and the location coordinates (latitude and longitude) are in the caption beneath each photo. The photos from the former vanadium plant area inspection have the heading Former Vanadium Plant Photo Log.

The inspection of the former plant are took place on August 9, 2008. The entire grid was established and then the inspection took place. The grid was set up by starting at the southwest corner of the former vanadium plant area. Line 1 was set up outside the former plant footprint along the south side of the plant area. A total of 5 lines were set up at 50 foot intervals in a northerly direction. Line 5 is outside the of the north limit of the former vanadium plant. Points were established along each line at 50 foot intervals. Point 1 of each line makes up the western boundary of the inspection area. Stakes with flagging were placed at 50 foot intervals along Line 1 and at Point 1 of each line. Additional stakes with flagging were put at each point of the lines at Lines 3 and 5 to ensure that the field engineer was walking along the correct grid line. The latitude and longitude coordinates of each intersection of the grid lines is shown in Table 3-7. The inspection area was rectangular with 5 lines and 6 points on each line.

The inspection of the former vanadium plant area resulted in observing several areas that could hold standing water. The field engineer also noted that there were several concrete foundations and floors that had not been covered with fine limestone. Examples of areas of exposed concrete are shown in Figures 1, 2 and 3.

A few areas that could accumulate water were observed during the inspection. These areas were either wet or holding water from a rain storm that occurred prior to the inspection. The areas that were observed holding water are shown in photos 5, 6, 7 and 8.

TABLE A-1

S-X POND POINTS

Line	Point 1		Point 2		Point 3		Point 4		Point 5	
	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
1	42°41.113	111°34.693	42°41.113	111°34.704	42°41.113	111°34.717	42°41.113	111°34.727	42°41.112	111°34.738
2	42°41.123	111°34.693	42°41.120	111°34.708	42°41.119	111°34.715	42°41.125	111°34.729	42°41.118	111°34.737
3	42°41.126	111°34.693	42°41.129	111°34.703	42°41.128	111°34.712	42°41.131	111°34.726	42°41.131	111°34.740
4	42°41.136	111°34.691	42°41.136	111°34.703	42°41.137	111°34.714	42°41.139	111°34.726	42°41.139	111°34.736
5	42°41.146	111°34.692	42°41.147	111°34.702	42°41.146	111°34.715	42°41.145	111°34.724	42°41.144	111°34.734
6	42°41.152	111°34.690	42°41.151	111°34.702	42°41.151	111°34.711	42°41.150	111°34.723	42°41.149	111°34.737
7	42°41.161	111°34.689	42°41.158	111°34.701	42°41.159	111°34.711	42°41.158	111°34.723	42°41.161	111°34.732
8	42°41.170	111°34.690	42°41.169	111°34.699	42°41.170	111°34.710	42°41.171	111°34.723	42°41.171	111°34.732
9	42°41.178	111°34.686	42°41.176	111°34.698	42°41.177	111°34.709	42°41.177	111°34.720	42°41.178	111°34.729
10	42°41.184	111°34.685	42°41.184	111°34.696	42°41.184	111°34.706	42°41.183	111°34.718	42°41.183	111°34.727
11	42°41.194	111°34.685	42°41.193	111°34.695	42°41.192	111°34.707	42°41.190	111°34.719	42°41.189	111°34.728
12	42°41.199	111°34.686	42°41.197	111°34.693	42°41.197	111°34.707	42°41.199	111°34.717	42°41.197	111°34.729
13	42°41.210	111°34.686	42°41.207	111°34.197	42°41.206	111°34.704	42°41.205	111°34.715	42°41.205	111°34.726
14	42°41.215	111°34.684	42°41.217	111°34.693	42°41.220	111°34.704	42°41.217	111°34.715	42°41.216	111°34.725
15	42°41.224	111°34.685	42°41.224	111°34.694	42°41.224	111°34.707	42°41.226	111°34.717	42°41.226	111°34.728
16	42°41.233	111°34.683	42°41.230	111°34.693	42°41.229	111°34.703	42°41.229	111°34.714	42°41.230	111°34.724
17	42°41.242	111°34.678	42°41.241	111°34.689	42°41.241	111°34.705	42°41.243	111°34.714	42°41.244	111°34.726

TABLE A-1

S-X POND POINTS (cont.)

Line	Point 6		Point 7		Point 8	
	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
1	42°41.112	111°34.748	42°41.112	111°34.761	42°41.112	111°34.772
2						
3	42°41.128	111°34.746				
4	42°41.138	111°34.746				
5	42°41.144	111°34.744				
6	42°41.147	111°34.743	42°41.144	111°34.756		
7	42°41.162	111°34.743	42°41.161	111°34.754	42°41.164	111°34.764
8	42°41.172	111°34.745	42°41.172	111°34.755	42°41.171	111°34.761
9	42°41.178	111°34.740	42°41.178	111°34.751	42°41.178	111°34.758
10	42°41.182	111°34.743	42°41.182	111°34.748	42°41.182	111°34.761
11	42°41.188	111°34.738	42°41.188	111°34.750	42°41.188	111°34.759
12	42°41.198	111°34.735	42°41.197	111°34.745	42°41.196	111°34.758
13	42°41.205	111°34.735	42°41.205	111°34.749	42°41.206	111°34.755
14	42°41.215	111°34.735	42°41.215	111°34.742	42°41.214	111°34.756
15	42°41.225	111°34.736	42°41.226	111°34.741	42°41.228	111°34.751
16	42°41.230	111°34.731	42°41.231	111°34.739	42°41.231	111°34.751
17	42°41.244	111°34.733	42°41.244	111°34.742	42°41.244	111°34.748

TABLE A-2

SCRUBBER POND POINTS

Line	Point 1		Point 2		Point 3		Point 4		Point 5	
	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
1	42°41.131	111°34.417	42°41.127	111°34.416	42°41.124	111°34.414	42°41.117	111°34.414		
2	42°41.131	111°34.411	42°41.130	111°34.408	42°41.128	111°34.408	42°41.122	111°34.408		
3	42°41.133	111°34.400	42°41.132	111°34.400	42°41.125	111°34.401	42°41.122	111°34.401		
4	42°41.134	111°34.396	42°41.131	111°34.396	42°41.124	111°34.396	42°41.120	111°34.397	42°41.113	111°34.397
5	42°41.134	111°34.390	42°41.129	111°34.388	42°41.127	111°34.388	42°41.123	111°34.389	42°41.115	111°34.388
6	42°41.133	111°34.384	42°41.130	111°34.381	42°41.129	111°34.382	42°41.122	111°34.383	42°41.117	111°34.383
7	42°41.133	111°34.376	42°41.131	111°34.377	42°41.131	111°34.377	42°41.124	111°34.376	42°41.116	111°34.377
8	42°41.136	111°34.371	42°41.131	111°34.371	42°41.128	111°34.372	42°41.124	111°34.373	42°41.117	111°34.373
9	42°41.136	111°34.362	42°41.132	111°34.363	42°41.128	111°34.363	42°41.124	111°34.363	42°41.117	111°34.363
10	42°41.137	111°34.357	42°41.133	111°34.356	42°41.132	111°34.356	42°41.124	111°34.354	42°41.118	111°34.354
11	42°41.139	111°34.351	42°41.134	111°34.349	42°41.128	111°34.349	42°41.124	111°34.349	42°41.119	111°34.349
12	42°41.138	111°34.344	42°41.134	111°34.342	42°41.130	111°34.343	42°41.127	111°34.344	42°41.121	111°34.344
13	42°41.139	111°34.338	42°41.136	111°34.337	42°41.131	111°34.338	42°41.126	111°34.339	42°41.123	111°34.338
14	42°41.137	111°34.331	42°41.137	111°34.331	42°41.136	111°34.330	42°41.129	111°34.331	42°41.119	111°34.333
15	42°41.135	111°34.325	42°41.134	111°34.325	42°41.128	111°34.324	42°41.122	111°34.326	42°41.119	111°34.325
16	42°41.131	111°34.319	42°41.126	111°34.318	42°41.120	111°34.318	42°41.114	111°34.320	42°41.112	111°34.319
17	42°41.126	111°34.314	42°41.127	111°34.312	42°41.124	111°34.312	42°41.117	111°34.313	42°41.113	111°34.313
18	42°41.127	111°34.306	42°41.123	111°34.306	42°41.117	111°34.306	42°41.113	111°34.305	42°41.108	111°34.305
19	42°41.128	111°34.299	42°41.124	111°34.298	42°41.118	111°34.298	42°41.112	111°34.297	42°41.108	111°34.298
20	42°41.120	111°34.294	42°41.120	111°34.292	42°41.114	111°34.290	42°41.108	111°34.292	42°41.106	111°34.291

TABLE A-2

SCRUBBER POND POINTS (cont.)

Line	Point 6		Point 7	
	Latitude	**Longitude**	**Latitude**	**Longitude**
1				
2				
3				
4	42°41.111	111°34.396		
5				
6				
7				
8	42°41.116	111°34.373		
9	42°41.114	111°34.363		
10	42°41.115	111°34.354		
11	42°41.115	111°34.350		
12	42°41.114	111°34.345	42°41.109	111°34.344
13	42°41.118	111°34.339	42°41.112	111°34.339
14	42°41.117	111°34.333	42°41.111	111°34.333
15	42°41.113	111°34.325	42°41.108	111°34.326
16	42°41.106	111°34.318		
17	42°41.107	111°34.312		
18				
19				
20				

TABLE A-3

LIMESTONE SETTLING PONDS

Line	Point 1		Point 2		Point 3		Point 4		Point 5	
	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
1	42°41.133	111°34.649	42°41.139	111°34.649	42°41.148	111°34.649	42°41.158	111°34.648	42°41.165	111°34.648
2	42°41.131	111°34.639	42°41.141	111°34.639	42°41.147	111°34.639	42°41.156	111°34.637	42°41.164	111°34.637
3	42°41.132	111°34.628	42°41.139	111°34.627	42°41.149	111°34.627	42°41.157	111°34.626	42°41.163	111°34.625
4	42°41.133	111°34.617	42°41.139	111°34.617	42°41.146	111°34.616	42°41.155	111°34.615	42°41.164	111°34.613
5	42°41.132	111°34.608	42°41.139	111°34.606	42°41.147	111°34.605	42°41.156	111°34.604	42°41.163	111°34.601
6	42°41.129	111°34.595	42°41.138	111°34.594	42°41.146	111°34.593	42°41.154	111°34.594	42°41.162	111°34.591
7	42°41.130	111°34.582	42°41.139	111°34.583	42°41.146	111°34.583	42°41.156	111°34.581	42°41.163	111°34.579
8	42°41.130	111°34.572	42°41.138	111°34.571	42°41.146	111°34.571	42°41.155	111°34.568	42°41.162	111°34.570
9	42°41.131	111°34.563	42°41.139	111°34.560	42°41.147	111°34.559	42°41.155	111°34.559	42°41.161	111°34.558
10	42°41.130	111°34.550	42°41.138	111°34.550	42°41.146	111°34.548	42°41.153	111°34.549	42°41.162	111°34.549
11	42°41.131	111°34.537	42°41.136	111°34.537	42°41.144	111°34.536	42°41.152	111°34.536	42°41.160	111°34.535

TABLE A-4

LANDFILL POINTS

	Point 1		Point 2		Point 3		Point 4		Point 5		Point 6	
Line	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
1	42°41.325	111°34.473	42°41.326	111°34.485	42°41.328	111°34.496	42°41.328	111°34.508	42°41.329	111°34.519	42°41.328	111°34.525
2	42°41.333	111°34.473	42°41.333	111°34.482	42°41.333	111°34.493	42°41.334	111°34.508	42°41.335	111°34.520	42°41.335	111°34.525
3	42°41.342	111°34.472	42°41.344	111°34.482	42°41.344	111°34.494	42°41.345	111°34.504	42°41.345	111°34.516	42°41.345	111°34.525
4	42°41.350	111°34.470	42°41.351	111°34.480	42°41.352	111°34.492	42°41.351	111°34.504	42°41.352	111°34.515	42°41.352	111°34.524
5	42°41.359	111°34.470	42°41.359	111°34.481	42°41.360	111°34.492	42°41.361	111°34.503	42°41.361	111°34.514	42°41.361	111°34.524
6	42°41.366	111°34.470	42°41.366	111°34.478	42°41.367	111°34.490	42°41.366	111°34.503	42°41.367	111°34.514	42°41.367	111°34.523
7	42°41.375	111°34.468	42°41.375	111°34.480	42°41.375	111°34.492	42°41.374	111°34.503	42°41.376	111°34.513	42°41.375	111°34.523
8	42°41.383	111°34.468	42°41.382	111°34.475	42°41.381	111°34.848	42°41.381	111°34.503	42°41.381	111°34.513	42°41.380	111°34.523
9	42°41.392	111°34.467	42°41.391	111°34.479	42°41.392	111°34.489	42°41.392	111°34.501	42°41.391	111°34.513	42°41.392	111°34.523

TABLE A-5

CALCINE CAP POINTS

	Point 1		Point 2		Point 3		Point 4		Point 5	
Line	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
1	42°41.121	111°34.167	42°41.120	111°34.180	42°41.119	111°34.189	42°41.120	111°34.200	42°41.120	111°34.211
2	42°41.128	111°34.166	42°41.127	111°34.177	42°41.128	111°34.188	42°41.126	111°34.200	42°41.125	111°34.212
3	42°41.133	111°34.163	42°41.136	111°34.175	42°41.137	111°34.188	42°41.137	111°34.188	42°41.136	111°34.209
4	42°41.144	111°34.163	42°41.143	111°34.175	42°41.144	111°34.186	42°41.143	111°34.197	42°41.144	111°34.209
5	42°41.154	111°34.162	42°41.152	111°34.175	42°41.154	111°34.186	42°41.153	111°34.196	42°41.154	111°34.208
6	42°41.160	111°34.162	42°41.159	111°34.174	42°41.158	111°34.185	42°41.158	111°34.199	42°41.160	111°34.217
7	42°41.167	111°34.160	42°41.168	111°34.174	42°41.168	111°34.184	42°41.168	111°34.194	42°41.167	111°34.206
8	42°41.177	111°34.160	42°41.176	111°34.172	42°41.175	111°34.182	42°41.177	111°34.196	42°41.177	111°34.206
9	42°41.185	111°34.159	42°41.185	111°34.173	42°41.185	111°34.184	42°41.188	111°34.195	42°41.187	111°34.206
10	42°41.193	111°34.158	42°41.193	111°34.173	42°41.194	111°34.182	42°41.193	111°34.194	42°41.195	111°34.205
11	42°41.200	111°34.157	42°41.200	111°34.172	42°41.202	111°34.184	42°41.203	111°34.196	42°41.203	111°34.206
12	42°41.209	111°34.157	42°41.211	111°34.170	42°41.210	111°34.180	42°41.212	111°34.193	42°41.212	111°34.205
13	42°41.216	111°34.158	42°41.218	111°34.172	42°41.219	111°34.182	42°41.220	111°34.193	42°41.221	111°34.203
14	42°41.226	111°34.157	42°41.227	111°34.170	42°41.228	111°34.179	42°41.229	111°34.191	42°41.229	111°34.204
15	42°41.234	111°34.156	42°41.233	111°34.170	42°41.236	111°34.180	42°41.237	111°34.192	42°41.237	111°34.203
16	42°41.243	111°34.155	42°41.244	111°34.171	42°41.245	111°34.182	42°41.245	111°34.194	42°41.246	111°34.205
17	42°41.251	111°34.155	42°41.252	111°34.169	42°41.252	111°34.181	42°41.254	111°34.192	42°41.254	111°34.202
18	42°41.261	111°34.155	42°41.260	111°34.170	42°41.261	111°34.180	42°41.261	111°34.191	42°41.265	111°34.202
19	42°41.267	111°34.155	42°41.267	111°34.168	42°41.269	111°34.179	42°41.269	111°34.189	42°41.272	111°34.201
20			42°41.279	111°34.166	42°41.278	111°34.180	42°41.279	111°34.189	42°41.279	111°34.200
21			42°41.286	111°34.168	42°41.285	111°34.178	42°41.286	111°34.189	42°41.288	111°34.200
22			42°41.292	111°34.171	42°41.294	111°34.180	42°41.293	111°34.189	42°41.296	111°34.201
23			42°41.301	111°34.169	42°41.302	111°34.178	42°41.303	111°34.188	42°41.304	111°34.199
24					42°41.308	111°34.178	42°41.310	111°34.189	42°41.311	111°34.199

TABLE A-5

CALCINE CAP POINTS (cont.)

Line	Point 6		Point 7		Point 8		Point 9		Point 10	
	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
1	42°41.118	111°34.222	42°41.117	111°34.233	42°41.116	111°34.245	42°41.115	111°34.255	42°41.117	111°34.266
2	42°41.127	111°34.221	42°41.127	111°34.232	42°41.127	111°34.243	42°41.127	111°34.254	42°41.125	111°34.264
3	42°41.138	111°34.220	42°41.136	111°34.231	42°41.137	111°34.243	42°41.137	111°34.253	42°41.136	111°34.265
4	42°41.144	111°34.219	42°41.143	111°34.231	42°41.144	111°34.241	42°41.143	111°34.252	42°41.144	111°34.263
5	42°41.153	111°34.218	42°41.152	111°34.230	42°41.152	111°34.242	42°41.151	111°34.264	42°41.151	111°34.264
6	42°41.160	111°34.218	42°41.158	111°34.231	42°41.157	111°34.241	42°41.155	111°34.253	42°41.157	111°34.264
7	42°41.169	111°34.217	42°41.167	111°34.229	42°41.167	111°34.239	42°41.166	111°34.252	42°41.166	111°34.263
8	42°41.177	111°34.218	42°41.177	111°34.227	42°41.176	111°34.241	42°41.176	111°34.259	42°41.175	111°34.262
9	42°41.189	111°34.217	42°41.188	111°34.228	42°41.188	111°34.240	42°41.188	111°34.250	42°41.188	111°34.260
10	42°41.196	111°34.217	42°41.197	111°34.227	42°41.198	111°34.238	42°41.198	111°34.249	42°41.198	111°34.260
11	42°41.203	111°34.214	42°41.205	111°34.225	42°41.206	111°34.238	42°41.206	111°34.250	42°41.206	111°34.262
12	42°41.213	111°34.217	42°41.214	111°34.227	42°41.215	111°34.235	42°41.215	111°34.246	42°41.216	111°34.259
13	42°41.220	111°34.216	42°41.221	111°34.227	42°41.221	111°34.240	42°41.223	111°34.250	42°41.223	111°34.261
14	42°41.230	111°34.216	42°41.229	111°34.225	42°41.230	111°34.234	42°41.232	111°34.247	42°41.232	111°34.258
15	42°41.239	111°34.214	42°41.240	111°34.225	42°41.240	111°34.225	42°41.240	111°34.248	42°41.240	111°34.260
16	42°41.247	111°34.214	42°41.247	111°34.224	42°41.249	111°34.238	42°41.249	111°34.248	42°41.249	111°34.259
17	42°41.254	111°34.214	42°41.255	111°34.224	42°41.255	111°34.237	42°41.257	111°34.246	42°41.257	111°34.257
18	42°41.265	111°34.214	42°41.264	111°34.227	42°41.264	111°34.236	42°41.264	111°34.249	42°41.264	111°34.260
19	42°41.272	111°34.213	42°41.273	111°34.223	42°41.272	111°34.235	42°41.272	111°34.248	42°41.274	111°34.257
20	42°41.279	111°34.211	42°41.281	111°34.222	42°41.280	111°34.233	42°41.283	111°34.245	42°41.283	111°34.259
21	42°41.288	111°34.212	42°41.289	111°34.221	42°41.289	111°34.233	42°41.291	111°34.245	42°41.292	111°34.254
22	42°41.296	111°34.211	42°41.297	111°34.221	42°41.297	111°34.234	42°41.298	111°34.243	42°41.299	111°34.255
23	42°41.304	111°34.210	42°41.305	111°34.221	42°41.304	111°34.234	42°41.306	111°34.242	42°41.307	111°34.254
24	42°41.311	111°34.211	42°41.311	111°34.221	42°41.312	111°34.232	42°41.311	111°34.241	42°41.315	111°34.254

TABLE A-5

CALCINE CAP POINTS (cont.)

	Point 11		Point 12		Point 13		Point 14		Point 15	
Line	**Latitude**	**Longitude**	**Latitude**	**Longitude**	**Latitude**	**Longitude**	**Latitude**	**Longitude**	**Latitude**	**Longitude**
1										
2	42°41.127	111°34.277								
3	42°41.135	111°34.277	42°41.136	111°34.287	42°41.136	111°34.297	42°41.136	111°34.309	42°41.136	111°34.320
4	42°41.142	111°34.275	42°41.143	111°34.285	42°41.142	111°34.297	42°41.143	111°34.308	42°41.142	111°34.339
5	42°41.151	111°34.274	42°41.152	111°34.285	42°41.152	111°34.297	42°41.151	111°34.308	42°41.150	111°34.320
6	42°41.156	111°34.276	42°41.156	111°34.286	42°41.155	111°34.297	42°41.156	111°34.308	42°41.156	111°34.318
7	42°41.166	111°34.272	42°41.167	111°34.284	42°41.166	111°34.296	42°41.166	111°34.367	42°41.164	111°34.317
8	42°41.175	111°34.272	42°41.177	111°34.286	42°41.175	111°34.297	42°41.177	111°34.306	42°41.177	111°34.317
9	42°41.188	111°34.272	42°41.189	111°34.284	42°41.191	111°34.295	42°41.189	111°34.306	42°41.192	111°34.316
10	42°41.199	111°34.271	42°41.200	111°34.282	42°41.200	111°34.293	42°41.201	111°34.305	42°41.201	111°34.316
11	42°41.207	111°34.272	42°41.208	111°34.282	42°41.210	111°34.291	42°41.211	111°34.304	42°41.210	111°34.314
12	42°41.217	111°34.270	42°41.215	111°34.283	42°41.218	111°34.294	42°41.221	111°34.305	42°41.221	111°34.316
13	42°41.223	111°34.272	42°41.225	111°34.293	42°41.225	111°34.293	42°41.225	111°34.305	42°41.226	111°34.316
14	42°41.232	111°34.270	42°41.233	111°34.281	42°41.232	111°34.292	42°41.234	111°34.304	42°41.235	111°34.314
15	42°41.241	111°34.270	42°41.242	111°34.282	42°41.242	111°34.293	42°41.243	111°34.303	42°41.242	111°34.314
16	42°41.250	111°34.269	42°41.249	111°34.280	42°41.252	111°34.290	42°41.254	111°34.301	42°41.253	111°34.313
17	42°41.258	111°34.269	42°41.260	111°34.277	42°41.259	111°34.292	42°41.261	111°34.304	42°41.260	111°34.315
18	42°41.265	111°34.270	42°41.264	111°34.282	42°41.267	111°34.292	42°41.268	111°34.303	42°41.269	111°34.314
19	42°41.276	111°34.270	42°41.276	111°34.278	42°41.275	111°34.292	42°41.276	111°34.302	42°41.276	111°34.313
20	42°41.283	111°34.268	42°41.284	111°34.280	42°41.284	111°34.290	42°41.284	111°34.300	42°41.285	111°34.311
21	42°41.291	111°34.266	42°41.291	111°34.277	42°41.293	111°34.290	42°41.292	111°34.299	42°41.293	111°34.309
22	42°41.299	111°34.266	42°41.299	111°34.277	42°41.301	111°34.287	42°41.302	111°34.298	42°41.303	111°34.309
23	*42°41.307*	*111°34.265*	*42°41.307*	*111°34.276*	*42°41.311*	*111°34.286*	*42°41.311*	*111°34.296*	*42°41.308*	*111°34.311*
24	42°41.317	111°34.276	42°41.317	111°34.276	42°41.318	111°34.286	42°41.318	111°34.297	42°41.318	111°34.309

TABLE A-5

CALCINE CAP POINTS (cont.)

Line	Point 16		Point 17		Point 18		Point 19		Point 20	
	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
1										
2										
3										
4	42°41.143	111°34.331	42°41.143	111°34.340	42°41.142	111°34.349	42°41.142	111°34.359	42°41.141	111°34.370
5	42°41.149	111°34.330	42°41.151	111°34.340	42°41.150	111°34.351	42°41.148	111°34.362	42°41.148	111°34.374
6	42°41.154	111°34.329	42°41.155	111°34.340	42°41.154	111°34.362	42°41.154	111°34.362	42°41.153	111°34.373
7	42°41.164	111°34.328	42°41.163	111°34.340	42°41.164	111°34.351	42°41.162	111°34.362	42°41.163	111°34.373
8	42°41.177	111°34.327	42°41.177	111°34.337	42°41.176	111°34.350	42°41.177	111°34.362	42°41.175	111°34.273
9	42°41.190	111°34.328	42°41.191	111°34.339	42°41.191	111°34.350	42°41.191	111°34.361	42°41.192	111°34.372
10	42°41.201	111°34.327	42°41.202	111°34.337	42°41.203	111°34.351	42°41.204	111°34.360	42°41.204	111°34.369
11	42°41.210	111°34.327	42°41.211	111°34.337	42°41.212	111°34.349	42°41.213	111°34.361	42°41.214	111°34.369
12	42°41.224	111°34.326	42°41.223	111°34.337	42°41.223	111°34.345	42°41.221	111°34.357	42°41.221	111°34.369
13	42°41.226	111°34.316	42°41.227	111°34.337	42°41.227	111°34.350	42°41.227	111°34.361	42°41.228	111°34.370
14	42°41.235	111°34.325	42°41.235	111°34.335	42°41.236	111°34.346	42°41.236	111°34.357	42°41.237	111°34.371
15	42°41.244	111°34.325	42°41.243	111°34.336	42°41.245	111°34.347	42°41.246	111°34.357	42°41.245	111°34.368
16	42°41.253	111°34.325	42°41.256	111°34.336	42°41.255	111°34.346	42°41.255	111°34.357	42°41.258	111°34.384
17	42°41.261	111°34.326	42°41.261	111°34.336	42°41.261	111°34.348	42°41.262	111°34.357	42°41.264	111°34.370
18	42°41.269	111°34.326	42°41.271	111°34.334	42°41.273	111°34.345	42°41.272	111°34.357	42°41.272	111°34.357
19	42°41.277	111°34.324	42°41.277	111°34.334	42°41.278	111°34.345	42°41.278	111°34.356	42°41.278	111°34.367
20	42°41.286	111°34.324	42°41.286	111°34.335	42°41.288	111°34.345	42°41.288	111°34.355	42°41.290	111°34.367
21	42°41.293	111°34.321	42°41.293	111°34.332	42°41.295	111°34.343	42°41.297	111°34.355	42°41.297	111°34.367
22	42°41.303	111°34.319	42°41.303	111°34.330	42°41.305	111°34.342	42°41.304	111°34.353		
23	42°41.311	111°34.319								
24										

TABLE A-5

CALCINE CAP POINTS (cont.)

	Point 21		Point 22		Point 23		Point 24		Point 25	
Line	**Latitude**	**Longitude**	**Latitude**	**Longitude**	**Latitude**	**Longitude**	**Latitude**	**Longitude**	**Latitude**	**Longitude**
1										
2										
3										
4	42°41.141	111°34.385	42°41.139	111°34.396						
5	42°41.146	111°34.305	42°41.145	111°34.397						
6	42°41.152	111°34.388	42°41.152	111°34.396						
7	42°41.163	111°34.389	42°41.163	111°34.395						
8	42°41.176	111°34.383	42°41.176	111°34.395						
9	42°41.193	111°34.384	42°41.193	111°34.394						
10	42°41.202	111°34.379	42°41.206	111°34.392						
11	42°41.214	111°34.380	42°41.214	111°34.391						
12	42°41.225	111°34.382	42°41.223	111°34.391						
13	42°41.229	111°34.381	42°41.230	111°34.393						
14	42°41.237	111°34.381	42°41.237	111°34.392						
15	42°41.246	111°34.380	42°41.247	111°34.390	42°41.247	111°34.403				
16	42°41.258	111°34.384	42°41.257	111°34.392	42°41.257	111°34.402				
17	42°41.264	111°34.380	42°41.265	111°34.394	42°41.285	111°34.402				
18	42°41.274	111°34.379	42°41.274	111°34.391	42°41.275	111°34.402				
19	42°41.280	111°34.378	42°41.281	111°34.390	42°41.280	111°34.402				
20	42°41.290	111°34.381	42°41.290	111°34.390	42°41.292	111°34.402				
21	42°41.298	111°34.377								
22										
23										
24										

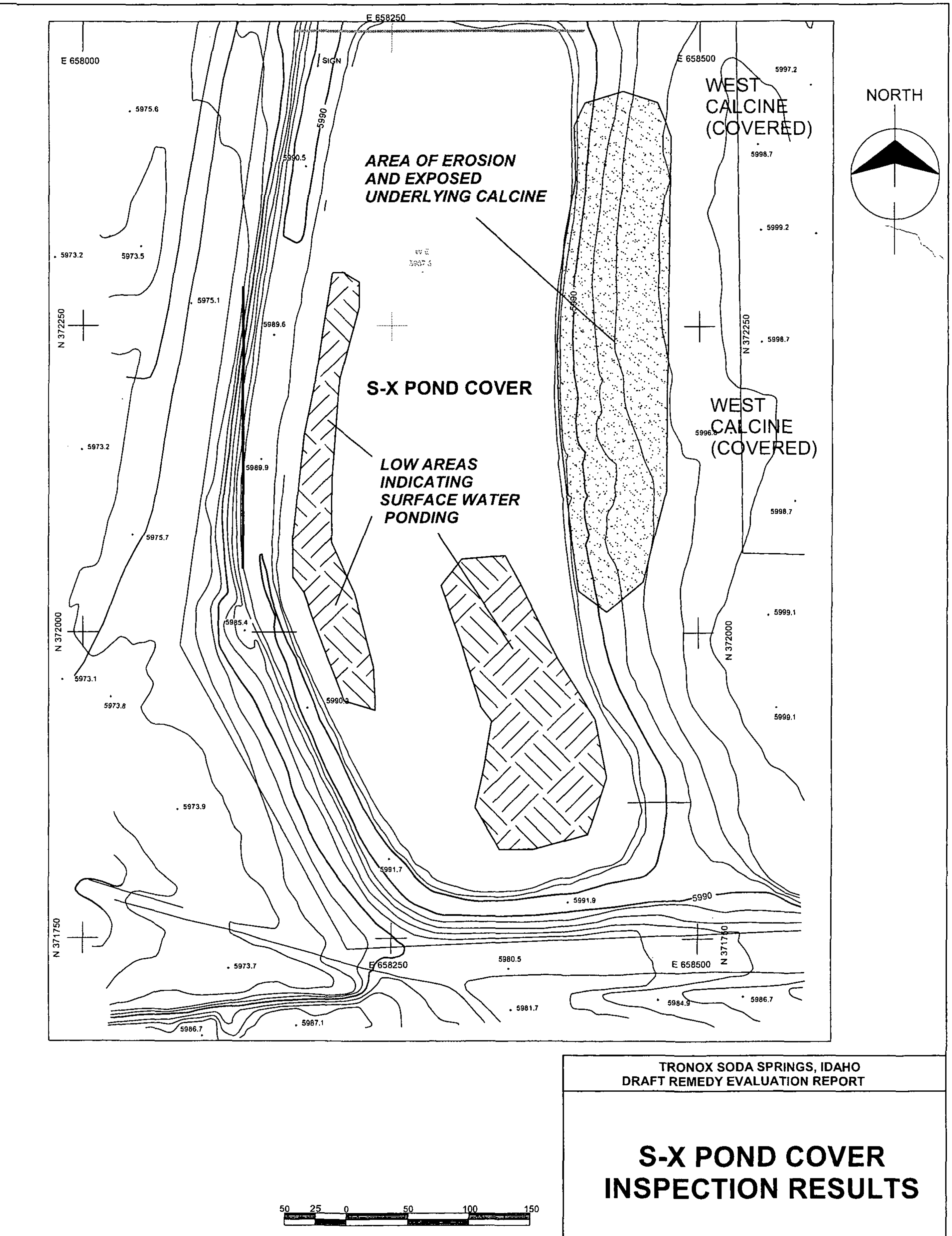
TABLE A-6

MAP POND POINTS

	Point 1		Point 2		Point 3		Point 4	
Line	**Latitude**	**Longitude**	**Latitude**	**Longitude**	**Latitude**	**Longitude**	**Latitude**	**Longitude**
1	42°41.273	111°34.527	42°41.276	111°34.537	42°41.274	111°34.550	42°41.274	111°34.560
2	42°41.279	111°34.528	42°41.281	111°34.540	42°41.281	111°34.551	42°41.282	111°34.560
3	42°41.287	111°34.525	42°41.291	111°34.536	42°41.287	111°34.548	42°41.290	111°34.557
4	42°41.296	111°34.525	42°41.296	111°34.536	42°41.296	111°34.545	42°41.295	111°34.558

FORMER PLANT SITE POINTS

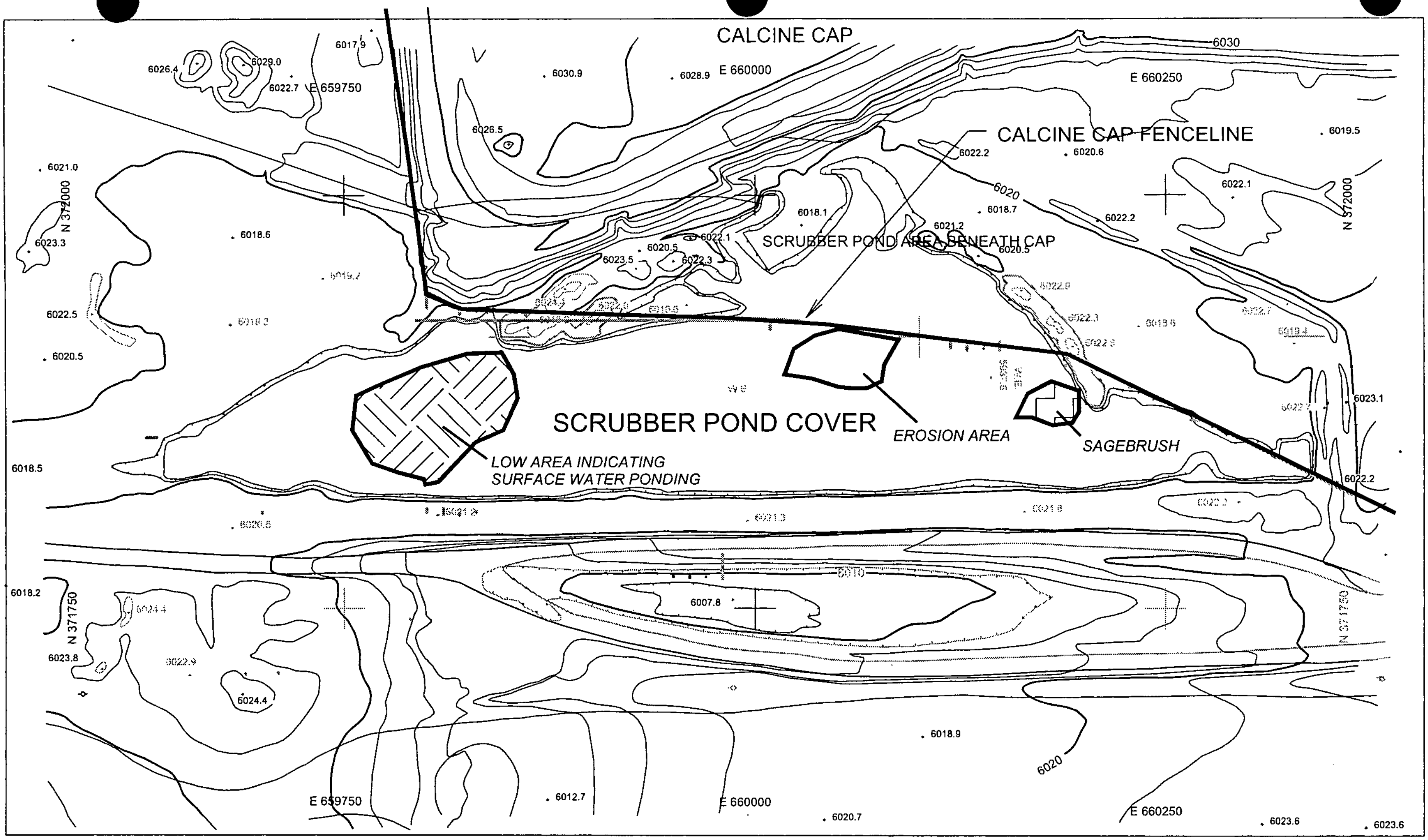
Line	Point 1		Point 2		Point 3		Point 4		Point 5		Point 6	
	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude
1	42°41.198	111°34.505	42°41.199	111°34.494	42°41.199	111°34.482	42°41.198	111°34.469	42°41.198	111°34.458	42°41.198	111°34.449
2	42°41.204	111°34.504	42°41.203	111°34.492	42°41.206	111°34.483	42°41.205	111°34.472	42°41.206	111°34.464	42°41.206	111°34.451
3	42°41.211	111°34.503	42°41.212	111°34.484	42°41.212	111°34.480	42°41.212	111°34.473	42°41.212	111°34.461	42°41.212	111°34.448
4	42°41.220	111°34.504	42°41.219	111°34.492	42°41.218	111°34.479	42°41.220	111°34.469	42°41.220	111°34.458	42°41.220	111°34.446
5	42°41.228	111°34.504	42°41.229	111°34.489	42°41.227	111°34.474	42°41.227	111°34.470	42°41.226	111°34.458	42°41.228	111°34.450



TRONOX SODA SPRINGS, IDAHO
DRAFT REMEDY EVALUATION REPORT

S-X POND COVER INSPECTION RESULTS

FIGURE A-1



50 25 0 50 100 150

SCALE as shown

CONTOUR INTERVAL 2'

DATE OF PHOTOGRAPHY OCTOBER 10,1991

DRAWN BY J.S.BROWN P.G.

DATE: 2/14/09

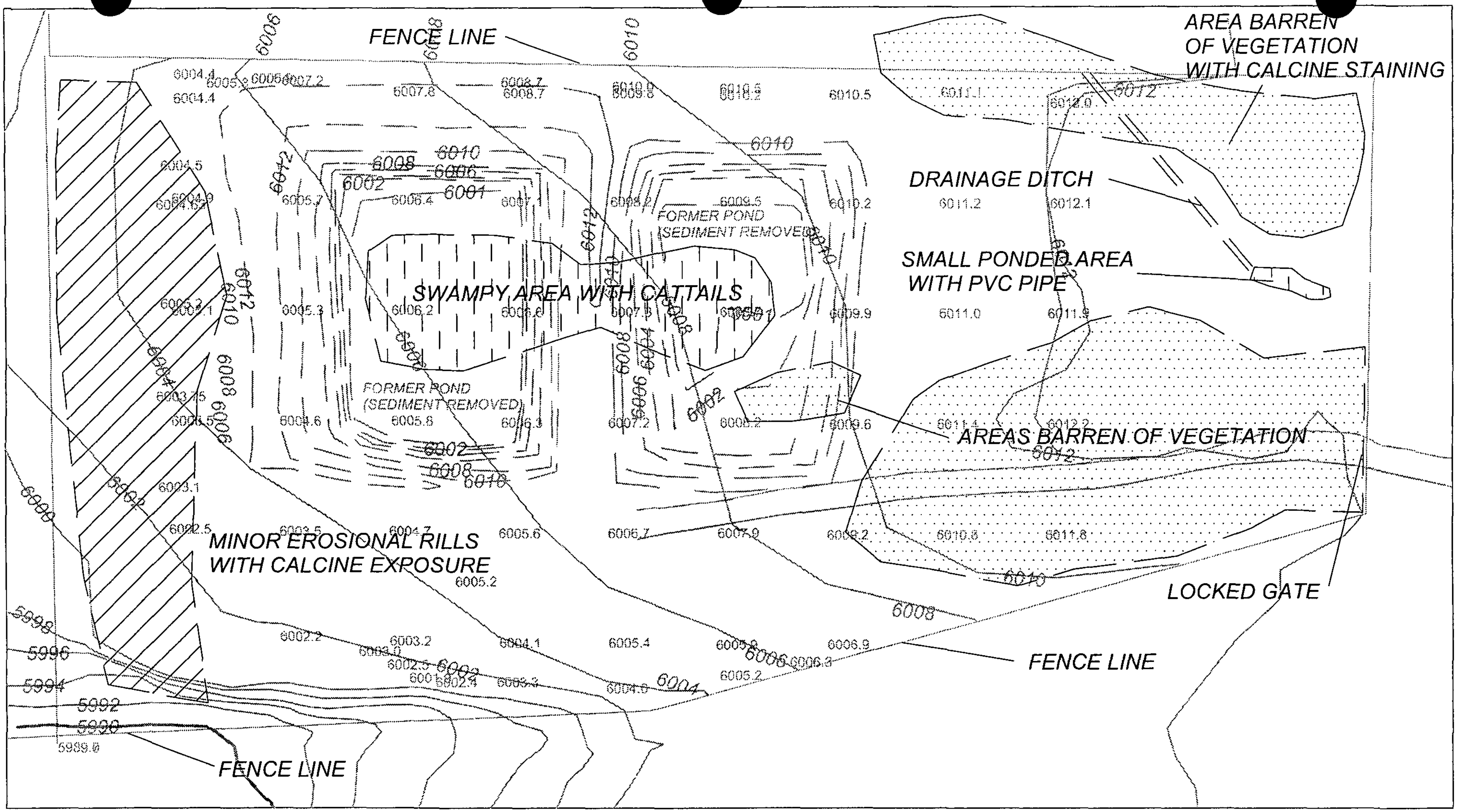
DRAFT REMEDY EVALUATION REPORT

TITLE

SCRUBBER POND COVER INSPECTION RESULTS

SIZE	CAGE CODE	DWG NO	REV
A			1

SCALE		SHEET	FIGURE- A-2



50 25 0 50 100 150

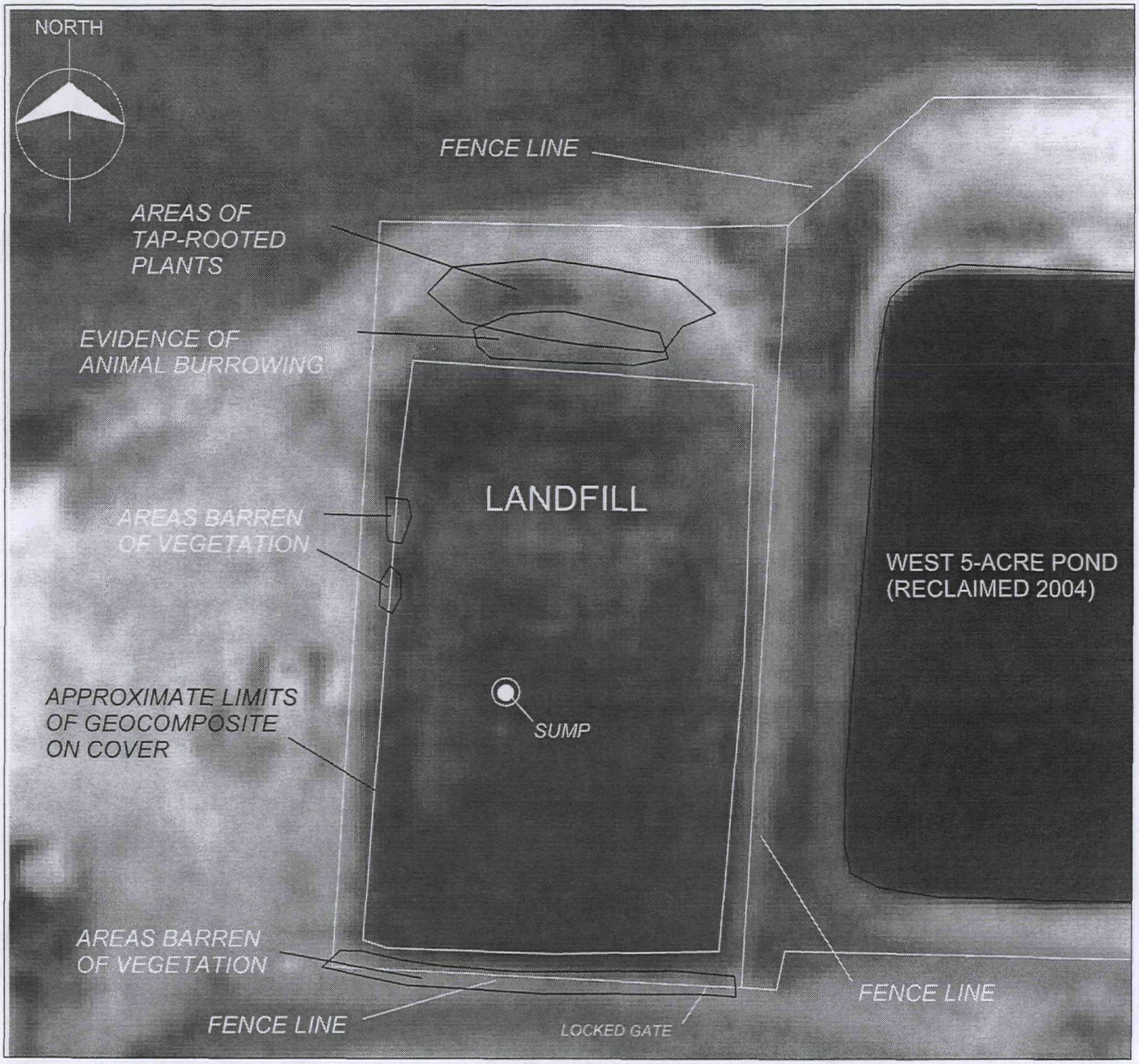
REMEDIAL INVESTIGATION REPORT, DAMES & MOORE, 1995

DRAFT REMEDY EVALUATION REPORT

TITLE

LIMESTONE SETTLING PONDS INSPECTION RESULTS

DRAWN BY J.S.BROWN P.G.	SIZE A	CAGE CODE	DWG NO	REV 1
DATE: 2/16/09	SCALE		SHEET	FIGURE- A-3



50 25 0 50 100 150

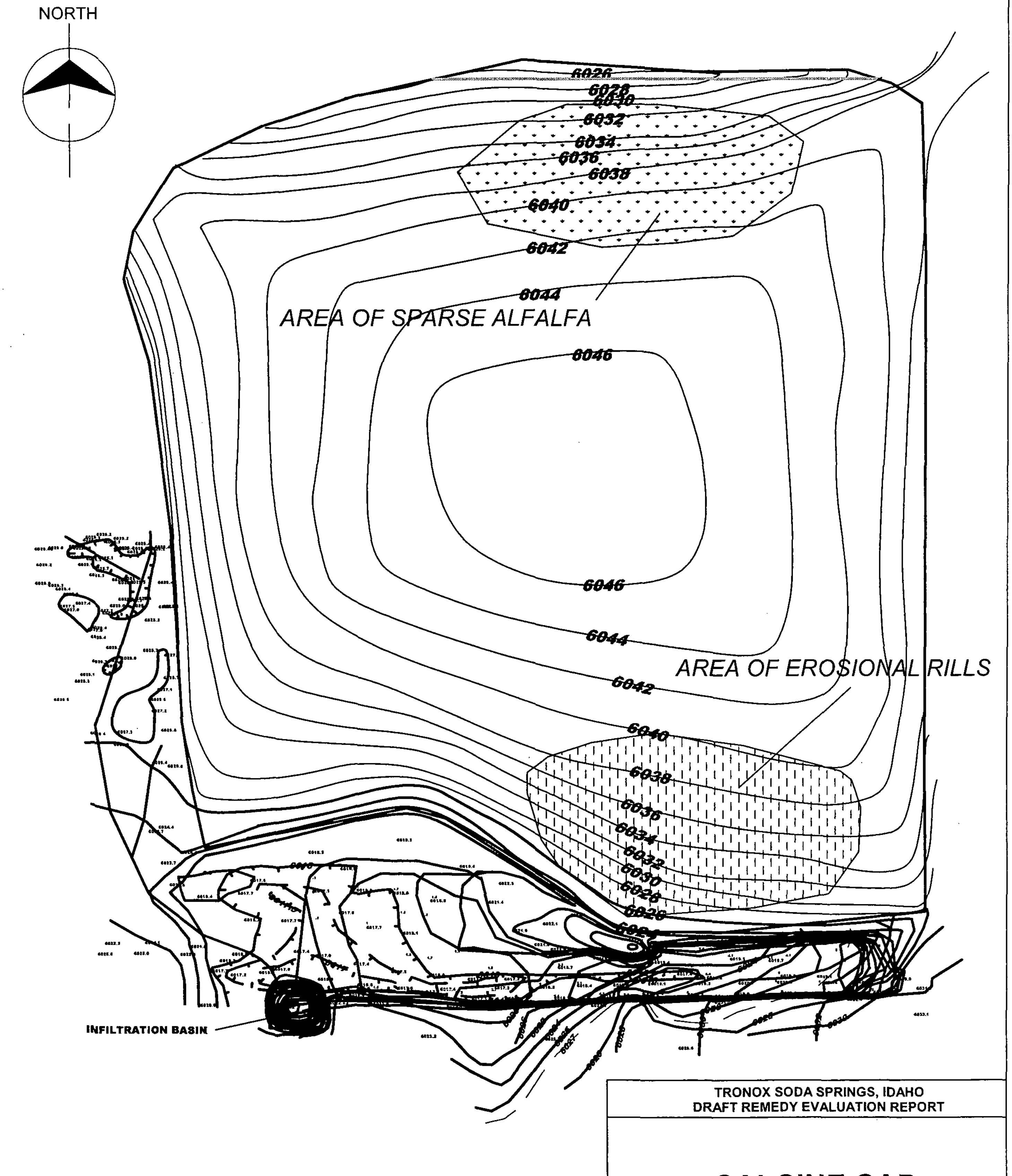
SCALE

DRAFT REMEDY EVALUATION REPORT

ON-SITE LANDFILL INSPECTION RESULTS

DATE OF PHOTOGRAPHY SEPTEMBER 7, 2000

FIGURE A-4

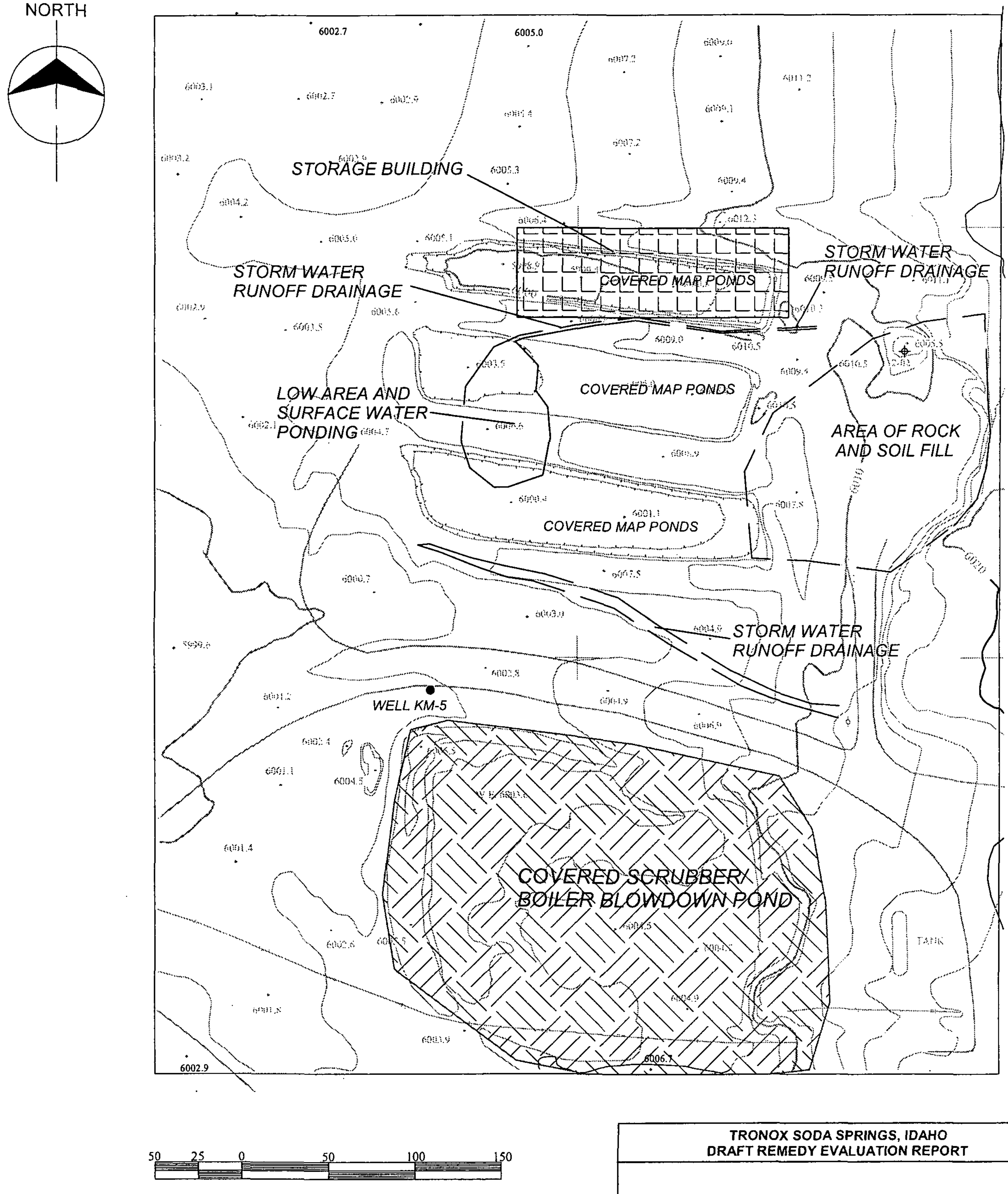


DATE OF PHOTOGRAPHY OCTOBER 10,1991

TRONOX SODA SPRINGS, IDAHO
DRAFT REMEDY EVALUATION REPORT

CALCINE CAP INSPECTION RESULTS

FIGURE A-5



CONTOUR INTERVAL 2'

DATE OF PHOTOGRAPHY OCTOBER 10,1991

TRONOX SODA SPRINGS, IDAHO
DRAFT REMEDY EVALUATION REPORT

MAP PONDS INSPECTION RESULTS

SCALE

CONTOUR INTERVAL 2'

DATE OF PHOTOGRAPHY OCTOBER 10,1991

FIGURE A-6

S-X POND
PHOTO LOG

Photo 2: Lat: 42°41.119 Long: 111°34.715
Low area, no vegetation, possible standing water. Photo taken from the east.

Photo 3: Lat: 42°41. 124 Long: 111°34.719
No vegetation with possible standing water. Photo taken from the south.

S-X POND
PHOTO LOG

Photo 4: Lat: 42°41.122 Long: 111°34.704
Low area, no vegetation. Photo taken from the south.

Photo 5: Lat: 42°41.122 Long: 111°34.694
Area with no vegetation. Photo taken from the southeast.

S-X POND
PHOTO LOG

Photo 6: Lat: 42°41.125 Long: 111°34.696
Four areas of no vegetation. Photo taken from the southeast.

Photo 7: Lat: 42°41.130 Long: 111°34.713
Low areas with no vegetation. Photo taken from the southeast.

S-X POND
PHOTO LOG

Photo 8: Lat: 42°41.129 Long: 111°34.713
Area with no vegetation, possible water accumulation. Photo taken from the north.

Photo 9: Lat: 42°41.141 Long: 111°34.698
Area of no vegetation with possible standing water drains to NW. Taken from SE.

S-X POND
PHOTO LOG

Photo 10: Lat: 42°41.138 Long: 111°34.146
Sink Hole about 2.5 ft in dia. And 18" deep. Photo taken from the east.

Photo 11: Lat: 42°41.147 Long: 111°34.702
Photo taken from east low area runs NW, SE.

S-X POND
PHOTO LOG

Photo 12: Lat: 42°41.147 Long:111°34.711
Low area with no vegetation. Photo taken from the east.

Photo 13: Lat: 42°41.146 Long: 111°34.715
Low area with water accumulation, drainage to the NW. Photo taken from the east.

S-X POND
PHOTO LOG

Photo 14: Lat: 42°41.154 Long: 111°34.60
Large bare area. Calcine exposed in rills. Photo taken from the south.

Photo 15: Lat: 42°41.154 Long: 111°34.700
Bare area, photo taken from the south.

S-X POND
PHOTO LOG

Photo 16: Lat: 42°41.151 Long: 111°34.706
Low area with no vegetation. Photo taken from southeast.

Photo 17: Lat: 42°41.151 Long: 111°34.719
Bare area running SE-NW. Photo taken from southeast.

S-X POND
PHOTO LOG

Photo 18: Lat: 42°41.159 Long: 111°34.719
Bare area connected to Photo 17. Photo from northeast.

Photo 19: Lat: 42°41.161 Long: 111°34.720
Bare area, photo taken from the southeast.

S-X POND
PHOTO LOG

Photo 20: Lat: 42°41.161 Long: 111°34.754
Bare area running N-S. Photo taken from the south.

Photo 21: Lat: 42°41.171 Long: 111°34.718
Bare area running N-S. Photo taken from the south.

S-X POND
PHOTO LOG

Photo 22: Lat: 42°41.169 Long: 111°34.718 (south end)
Bare area, photo taken from south.

Photo 23: Lat: 42°41.169 Long: 111°34.687
Bare area running N-S. Photo taken from the south.

S-X POND
PHOTO LOG

Photo 24: Lat: 42°41.177 Long: 111°34.687
Exposed calcine. Photo taken from the east.

Photo 25: Lat: 42°41.176 Long: 111°34.711
Bare area, photo taken from the northeast.

S-X POND
PHOTO LOG

Photo 26: Lat: 42°41.177 Long: 111°34.728
Bare area, possible water accumulation, photo taken from north/northwest.

Photo 27: Lat: 42°41.188 Long: 111°34.750
N-S bare area, photo taken from the south.

S-X POND
PHOTO LOG

Photo 28: Lat: 42°41.190 Long: 111°34.719
Bare area. Photo taken from the south.

Photo 29: Lat: 42°41.193 Long: 111°34.695
Exposed calcine, photo taken from the west.

S-X POND
PHOTO LOG

Photo 30: Lat: 42°41.199 Long: 111°34.686
Bare area with ant hill. Photo taken from the north.

Photo 31: Lat: 42°41. 206 Long: 111°34.748
Bare area, photo taken from the north.

S-X POND
PHOTO LOG

Photo 32: Lat: 42°41.207 Long:111°34.697
Bare spot at east edge of pond, photo taken from the south.

Photo 33: Lat: 42°41.219 Long: 111°34.694
Bare area with calcine just above pond's east edge. Photo taken from the south.

S-X POND
PHOTO LOG

Photo 34: Lat: 42°41.224 Long: 111°34.694
Bare area with exposed calcine. Photo taken from the south.

Photo 35: Lat: 42°41.234 Long: 111°34.699
Bare area at ponds NE edge. Photo taken from the southeast.

S-X POND
PHOTO LOG

Photo 36: Lat: 42°41.242 Long: 111°34.730
Burrowing animal hole. Photo taken from the east.

Photo 37: Lat: 42°41.243 Long: 111°34.714
Bare area at edge of pond. Photo taken from the west.

S-X POND
PHOTO LOG

Photo 38: Lat: 42°41.155 Long: 111°34.698
Burrowing animal hole. Photo taken from the west.

Photo 39: Lat: 42°41.229 Long: 111°34.715
Bare area, photo taken from the west.

S-X POND
PHOTO LOG

Photo 40: Lat: 42°41.143 Long: 111°34.734
Burrowing animal hole. Photo taken from the north.

Photo 41: Lat: 42°41.216 Long: 111°34.740
Burrowing animal hole. Photo taken from the west.

SCRUBBER POND
PHOTO LOG

Photo 1: Lat: 42°41.130 Long: 111°34.408
Drain from west side calcine photo taken from south.

Photo 2: Lat: 42°41.130 Long: 111°34.408
Drain from west side of cap, photo taken from the west.

SCRUBBER POND
PHOTO LOG

Photo 3: Lat: 42°41.127 Long: 111°34.408
Bare area, photo taken from the south.

Photo 4: Lat: 42°41.131 Long: 111°34.392
Large bare area, photo taken from the west.

SCRUBBER POND
PHOTO LOG

Photo 5: Lat: 42°41.123 Long: 111°34.396
Bare area, photo taken from the west.

Photo 6: Lat: 42°41.130 Long: 111°34.377
Bare area, evidence of water accumulation, photo taken from the northwest.

SCRUBBER POND
PHOTO LOG

Photo 7: Lat: 42°41.123 Long: 111°34.389
Bare area connected to area in photo 6. Taken from the west.

Photo 8: Lat: 42°41.131 Long: 111°34.377
Evidence of standing water, drain to infiltration basin. Photo from NW.

SCRUBBER POND
PHOTO LOG

Photo 9: Lat: 42°41.104 Long: 111°34.361
Infiltration basin. Photo taken from the north.

Photo 10: Lat: 42°41.153 Long: 111°34.356
Large bare area, photo taken from the northeast.

SCRUBBER POND
PHOTO LOG

Photo 11: Lat: 42°41.153 Long: 111°34.356
Large bare area, photo taken from the northeast.

Photo 12: Lat: 42°41.108 Long: 111°34.356
Pond drain into basin. Photo taken from the north.

SCRUBBER POND
PHOTO LOG

Photo 13: Lat: 42°41.126 Long: 111°34.339
Bare area eastern side of pond. Photo taken from the west.

Photo 14: Lat: 42°41.120 Long: 111°34.337
Bare area, photo taken from the west.

SCRUBBER POND
PHOTO LOG

Photo 15: Lat: 42°41.114 Long: 111°34.370
Bare area, photo taken from the east.

Photo 16: Lat: 42°41.120 Long: 111°34.292
Crusted limestone (old road?) photo taken from the west.

SCRUBBER POND
PHOTO LOG

Photo 17: Lat: 42°41.106 Long: 111°34.306
Erosional rill along south edge of high area. Photo taken from the east.

Photo 18: East half of cover.
Volunteer sagebrush.

LIMESTONE SETTLING POND PHOTO LOG

Photo 1: Lat: 42°41.133 Long: 111°34.649
Erosional rill, photo taken from the west.

Photo: 2 Lat: 42°41.139 Long: 111°34.649
Burrowing animal holes. Photo taken from the west.

LIMESTONE SETTLING POND PHOTO LOG

Photo 3: Lat: 42°41.131 Long: 111°34.639
Bare spot, photo taken from the south.

Photo 4: Lat: 42°41.146 Long: 111°43.616
Surface runoff, photo taken from the west.

LIMESTONE SETTLING POND
PHOTO LOG

Photo 5: Lat: 42°41.163 Long: 111°34.601
West edge of cattails, photo taken from the west.

Photo 6: Lat: 42°41.156 Long: 111°34.604
Deep taproot plant, photo taken from the west.

LIMESTONE SETTLING POND PHOTO LOG

Photo 7: Lat: 42°41.162 Long: 111°34.591
Bare area, photo taken from the north.

Photo 8: Lat: 42°41.146 Long: 111°34.583
Bare area. Photo taken from the west.

LIMESTONE SETTLING POND
PHOTO LOG

Photo 9: Lat: 42°41.146 Long: 111°34.583
Animal hole. Photo taken from the east.

Photo 10: Lat: 42°41.162 Long: 111°34.570
Large bare area with calcine staining. Photo taken from the east.

LIMESTONE SETTLING POND
PHOTO LOG

Photo 11: Lat: 42°41.162 Long: 111°34.570
Drainage ditch at the east end of the fenced area. Photo taken from the northeast.

Photo 12: Lat: 42°41.130 Long: 111°34.572
Access road, photo taken from the west.

LIMESTONE SETTLING POND PHOTO LOG

Photo 13: Lat: 42°41.1.39 Long: 111°34.560
Edge of large bare area, photo taken from the west.

Photo 14: Lat: 42°41.161 Long: 111°34.558
Large bare area, photo taken from the east.

LIMESTONE SETTLING POND PHOTO LOG

Photo 15: Lat: 42°41.146 Long: 111°34.548
Small pond near east fence. Photo taken from the south.

Photo 16: Lat: 42°41.146 Long: 111°34.548
Bare area north of small pond. Photo taken from the southeast.

LIMESTONE SETTLING POND PHOTO LOG

Photo 17: Lat: 42°41.147 Long: 111°34.545
Animal hole on the east side of small pond. Photo taken from the north.

Photo 18: Lat: 42°41.131 Long: 111°34.537
Drainage along south fence. Photo taken from the east.

LIMESTONE SETTLING POND PHOTO LOG

Photo 19: Lat: 42°41.140 Long: 111°34.543 (center)
Bare area with calcine staining. Photo taken from the south.

ON-SITE LANDFILL
PHOTO LOG

Photo 1: Bare area along south fence.
Photo taken from the west.

Photo 2: Lat: 42° 41.335 Long: 111° 34.525
Burrowing animal hole. Photo taken from the west.

ON-SITE LANDFILL
PHOTO LOG

Photo 3: Lat: 42°41.335 Long: 111°34.525
Burrowing animal hole. Photo taken from the west.

Photo 4: Lat: 42°41.335 Long: 111°34.520
Burrowing animal hole. Photo from the south.

ON-SITE LANDFILL
PHOTO LOG

Photo 5: Lat: 42°41.361 Long: 111°34.524 (outside of landfill boundaries)
Area of dead vegetation. Photo taken from the west.

Photo 6: Burrow hole under fence.
Picture from the east.

ON-SITE LANDFILL
PHOTO LOG

Photo 7: Lat: 42° 41.344 Long: 111° 34.482
Evidence of burrowing animals. Photo taken from the north.

Photo 8: Lat: 42°41.375 Long: 111°34.523
Clear area with sparse vegetation. Photo taken from the west.

ON-SITE LANDFILL
PHOTO LOG

Photo 9: Lat: 42°41.382 Long: 111°34.475
Big burrowing animal hole outside of landfill footprint.

Photo 10: Lat: 42°41.392 Long: 111°34.489
Unidentified deep taproot plant outside of landfill footprint. Photo taken from the north.

ON-SITE LANDFILL
PHOTO LOG

Photo 11: Lat: 42°41.392 Long: 111°34.489
Clump of alfalfa near north fence. Photo taken from the south.

Photo 12: Lat: 42°41.372 Long: 111°34.523
Clump of alfalfa outside of landfill footprint. Photo taken from the west.

CALCINE CAP
PHOTO LOG

Photo 1: Lat: 42°41.121 Long: 111°34.167
Animal digging under the fence. Photo taken from the north.

Photo 2: Lat: 42°41.120 Long: 111°34.211
Tumbleweeds, photo taken from the west.

CALCINE CAP
PHOTO LOG

Photo 3: Lat: 42°41.118 Long: 111°34.222
Thistles, photo taken from the east.

Photo 4: Lat: 42°41.927 Long: 111°34.277
Possible deep taproot plant. Photo taken from the north.

CALCINE CAP
PHOTO LOG

Photo 5: Lat: 42°41.125 Long: 111°34.265
Burrowing animal hole, photo taken from the north.

Photo 6: Lat: 42°41.128 Long: 111°34.248
Erosion rill, photo taken from the south.

CALCINE CAP
PHOTO LOG

Photo 7: Lat: 42°41.127 Long: 111°34.240
Erosion rill, photo taken from the south.

Photo 8: Lat: 42°41. 126 Long: 111°34.200
Sagebrush, photo taken from the east.

CALCINE CAP
PHOTO LOG

Photo 9: Lat: 42°41.138 Long: 111°34.167
Alfalfa, photo taken from the east.

Photo 10: Lat: 42°41.137 Long: 111°34.217
Animal hole, photo taken from the north.

CALCINE CAP
PHOTO LOG

Photo 11: Lat: 42°41.138 Long: 111°34.295
Animal hole, photo taken from the northwest.

Photo 12: Lat: 42°41.143 Long: 111°34.175
Sagebrush, photo taken from the east.

CALCINE CAP
PHOTO LOG

Photo 13: Lat: 42°41.154 Long: 111°34.171
Animal holes, photo taken from the east.

Photo 14: Lat: 42°41.155 Long: 111°34.355
Erosion rill, photo taken from the north.

CALCINE CAP
PHOTO LOG

Photo 15: Lat: 42°41.203 Long: 111°34.195
Animal hole, photo taken from the southeast.

Photo 16: Lat: 42°41.214 Long: 111°34.232
Animal hole, photo taken form the northwest.

CALCINE CAP
PHOTO LOG

Photo 17: Lat: 42°41.226 Long: 111°34.357
Animal hole, photo taken from the north.

Photo 18: Lat: 42°41.245 Long: 111°34.219
Animal hole, photo taken from the southwest.

CALCINE CAP
PHOTO LOG

Photo 19: Lat: 42°41.272 Long: 111°34.225
Canadian thistle, photo taken from the southeast.

Photo 20: Lat: 42°41.290 Long: 111°34.381
Alfalfa.

CALCINE CAP
PHOTO LOG

North infiltration basin.

FORMER VANADIUM PLANT
PHOTO LOG

Photo 1: West side of old plant.
Old concrete floors exposed, photo taken from the southwest.

Photo 2: South side of plant.
Old concrete floors exposed, photo from the south.

FORMER VANADIUM PLANT
PHOTO LOG

Photo 3: Lat: 42° 41.199' Long: 111° 34.482'
Exposed concrete. Old S-X Floor.

Photo 4: Former plant site from the south.

FORMER VANADIUM PLANT
PHOTO LOG

Photo 5: Lat: 42° 41.198' Long: 111° 34.469'
Water accumulation area. Photo taken from the south.

Photo 6: Lat: 42° 41.212' Long: 111° 34.484'
Wet area near old leach area. Photo taken from the south.

FORMER VANADIUM PLANT
PHOTO LOG

Photo 7: Lat: 42° 41.212' Long: 111° 34.448'
Water accumulation area. Photo taken from the south.

Photo 8: Lat: 42° 41.219' Long: 111° 34.492'
Water accumulation area. Photo taken from the north.

FORMER VANADIUM PLANT
PHOTO LOG

Photo 10: Area of coarser material on surface.
Photo taken from the northwest.

MAP POND
PHOTO LOG

Photo 5: Lat: 42°41.287 Long: 111°34.544
Bare area, photo taken from the northwest.

Photo 6: Lat: 42°41.296 Long: 111°34.525
Storm water run on to pond area, photo taken from the west.

MAP POND
PHOTO LOG

Photo 7: Lat: 42°41.295 Long: 111°34.558
Bare area and storm water run on. Photo taken from the west.

APPENDIX B

LONG-TERM MONITORING OPTIMIZATION REPORT FOR THE KERR-McGEE CHEMICAL CORPORATION SUPERFUND SITE, TRONOX FACILITY SODA SPRINGS, IDAHO

December 18, 2008

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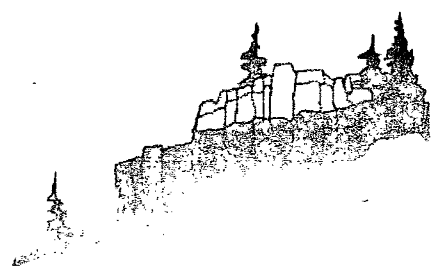

EXECUTIVE SUMMARY

Long-term monitoring optimization (LTMO) was performed on data from the Tronox facility, formerly the Kerr-McGee Superfund Site, in Soda Springs, Idaho. The U.S. Environmental Protection Agency (EPA) recommended LTMO after conducting the second five-year review of site progress. LTMO was used to evaluate the adequacy of the monitoring network in characterizing migration of chemicals of concern (COCs).

The Monitoring and Remediation Optimization System (MAROS) geostatistical software program was selected for data analysis. The MAROS program applies heuristically-derived rules based on trend analysis results and site information to determine the current status of the groundwater plume and utilizes rigorous statistical methods (i.e. Delaunay Triangulation and Cost Effective Sampling) to provide recommendations on the adequacy of the number of wells, sampling frequency, and well density.

To prepare for the evaluation the existing long-term monitoring (LTM) program was documented, the groundwater modeling for the site remedial investigation was critically reviewed, and the conceptual site model was updated to reflect current understanding of site hydrogeologic conditions and transport processes. This preparation was critical in defining and justifying hydrogeologic input parameters and physical site parameters used in the program. The details and dynamics of the complex hydrogeologic system and contaminant transport processes had to be simplified to accommodate the two- and three-dimensional statistical and analytical calculations. The two main COCs at the site, molybdenum and vanadium, were used to represent contaminant trends in the evaluation.

Results from the plume analysis and spatial moment analysis indicate that both molybdenum and vanadium plumes have decreased since LSE was completed in 1997, with some wells reaching a flat slope showing no trend or even a slightly increasing trend. Analyses illustrated that molybdenum and vanadium have different reactions and migration patterns in the subsurface. The optimization of sampling location and frequency concluded that all sampling locations are valid, although sampling frequency could possibly be reduced in select wells. The MAROS data sufficiency analysis of cleanup by well and site confirmed that cleanup has not been attained and may take several years to achieve.

In conclusion, the numerical and statistical evaluation of the LTMO program at Tronox was advantageous in establishing guidelines and techniques that can be used in the future. Although a possible reduction in the frequency of sampling select wells was suggested, implementation of this reduction is not practical at the current time. The combination of the statistical approach with professional judgment provides confidence in the direction of continued LTM as a remedy for COCs in groundwater. The LTMO process should be applied to site data periodically to look for potential reductions in scope and cost of the existing program while maintaining quality and effectiveness. No changes to the sampling program are recommended at this time.

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LONG-TERM MONITORING OPTIMIZATION REPORT FOR THE KERR-McGEE CHEMICAL CORPORATION SUPERFUND SITE, TRONOX FACILITY SODA SPRINGS, IDAHO

1.0 Introduction

Long-term monitoring (LTM) at the Tronox facility is an integral part of the site remedy that was instituted in 1997 and is used to both document changes in concentrations of chemicals of concern (COCs) in groundwater and demonstrate progress toward achieving clean-up goals. The EPA completed a 10-year review of the site in September 2007 and requested an evaluation of the LTM program as part of the overall remedy evaluation (EPA, 2008). The EPA recommended the use of LTM optimization (LTMO) to evaluate the adequacy of the monitoring network in characterizing migration of COCs and suggested the Monitoring and Remediation Optimization System (MAROS) geostatistical software as a tool for the analysis.

The MAROS program (GSI, 2008) was used in assessing spatial and temporal trends in the groundwater analytical data and examining the effectiveness of the current network of monitoring wells. The program evaluation followed guidance for long-term monitoring optimization (LTMO) provided by the Air Force Center for Environmental Excellence (AFCEE) in the MAROS Software User's Guide (AFCEE 2006a) and accompanying publication (AFCEE 2006b), as well as the EPA Roadmap to LTMO (EPA 2005).

This report includes a review of basic site information including site conditions and the status of the monitoring program, an overview of the hydrogeologic setting and COC trends, a review of groundwater model transport simulations made prior to the execution of the remedy, and a discussion of the conceptual site model (CSM). This information provides the justification for application of the software` and rationale for the selection of input parameters used in the MAROS program. A discussion of the optimization approach and results of the geostatistical assessment of the existing LTM program are presented with recommendations for future program monitoring.

2.0 Site Conditions and Monitoring Program

The Tronox site (formerly known as the Kerr-McGee Chemical Corporation site) was constructed in 1963 and began production of vanadium in March 1964. A number of solid and liquid waste impoundments were generated during the time of operation, which continued through January 1999 when the plant was shut down. The site was placed on the National Priorities List, while it was in operation in 1989. The Remedial Investigation (RI) was completed in 1995 and the Feasibility Study (FS) for the entire site was completed in 1996. A supplemental FS for the calcine capping was completed in 2000. Remedial actions for the site remedy were conducted between 1997 and August 2001, followed by LTM.

The RI report (Dames & Moore, 1995a) identified three unlined ponds (S-X pond, scrubber pond, and calcine pond) as the predominant sources of contaminant-bearing seepage observed in groundwater beneath the facility. Total seepage from the ponds was estimated to be about 300 to 350 gallons per minute. Natural leaching of the solid sources was considered to have much smaller impact.

The 80-acre area containing the former plant and waste impoundments is referred to as the plant facility or the on-site area. The plant facility lies within the north-central portion of the Tronox property boundary. Features outside of the plant facility are referred to as off-site, even though they may be on Tronox property. Since plant closure, a landfill was constructed outside the northern edge of the plant facility and a 10-acre pond was created outside the eastern edge of the plant facility. Both the landfills and 10-acre pond are "off-site" meaning outside the plant facility area.

Details of the monitoring well network are provided in the recent report by Global Environmental Technologies (GET, 2008). In summary, the groundwater monitoring network consists of 14 on-site monitor wells (within the plant facility), 4 off-site monitor wells (south of the plant facility but within the Tronox property boundary), and 4 springs that are outside the Tronox property boundary. Nine of the 14 on-site wells have been named point-of-compliance (POC) wells. The POC wells are located on the southern and western edges of the plant facility. Water levels and water quality are monitored in on-site and off-site wells and water quality is monitored in springs on a semi-annual basis, in the spring and fall. The groundwater analytical database for the site contains semi-annual results for wells and springs collected between October 1995 and May 2008. The database also contains several single sampling events at select locations and quality assurance duplicate sample results. Limited data from Monsanto and Evergreen are included in the database.

Six COCs were identified at the site in the RA and include arsenic, manganese, molybdenum, tributyl phosphate, total petroleum hydrocarbons and vanadium. Field parameters are collected during sampling and samples are analyzed for the six COCs as well as additional analytes. Details of the monitoring program are provided in the Groundwater Monitoring Network Evaluation Report (GET, 2008)

3.0 Hydrogeologic Setting

The following discussion of the hydrogeologic setting is summarized from the RI. The site is located about 1.5 miles northeast of the City of Soda Springs, within the Bear River Basin, which is characterized by broad, flat valleys bordered by northwest trending mountain ranges. The valley where the site is situated is part of the Bear Lake Fault Graben Structure, a long narrow graben extending from Bear Lake (south of Soda Springs) to the Blackfoot Reservoir (13 miles north of the site). The facility is located near the center of the valley with the Chesterfield Range and the Soda Springs Hills to the west and the Aspen Range to the east. The facility is within the Blackfoot Lava Field which fills the valley between the mountain ranges and is characterized by irregular surface of numerous cliffs, scarps, collapse structures and fissures.

Site geology, to a depth of about 230 feet, consists of intermittent alluvial deposits, Quaternary basalts and interflow zones, and the Tertiary Salt Lake Formation. The alluvium refers to all of the unconsolidated surficial deposits that overlie bedrock, including alluvium, loess, and weathered basalt. The underlying basalt consists of five individual basalt flows that range from 20 to 80 feet thick. Interflow zones between the basalt flows are predominantly comprised of clay with lesser amounts of basalt, gravel, cinder, and organic materials. The basalts and interflow zones dip gently to the west. The underlying Salt Lake Formation consists of sandstones, conglomerates, and limestones.

Four north-trending faults transect the geology beneath the site. The faults are interpreted from seismic data and surficial features (northern trace of the Finch Spring Fault). The faults are typically downthrown to the west with small (less than 20 feet) displacements.

The shallow groundwater system in the valley consists of groundwater that occurs within the alluvium (limited areas), the basalt sequences and the basalt interflow zones, and the Salt Lake Formation. The basalts form the major aquifer for wells in the region with water occurring in fractures, joints, rubble zones, and inter-layered cinder beds. The Salt Lake Formation is considered a highly unpredictable source of water supply with variable yield. Recharge to the shallow system occurs through infiltration of precipitation, leakage from the Blackfoot Reservoir, and from groundwater originating from the Meade Thrust Aquifer System (originating from the Aspen Range to the east of the site) and the Chesterfield Range Aquifer System (west of the site).

In general, groundwater flows from the mountain ranges toward the center of the valley, then southwest toward the Bear River. Springs occur on both sides of the valley. Finch Spring, Upper and Lower Ledger Springs, and Big Spring are located south of the facility, at distances of 4,000 feet to 2.7 miles south. Big Spring is the most distant sampled spring, located south of the town of Soda Springs.

All the on-site and off-site wells that form the monitoring network were installed within the basalts. Thirteen of the 18 wells are designated as shallow wells, completed with 10 feet of screen across the first occurrence of groundwater noted during drilling (total depths of 45 to 73 feet). Four wells are designated as intermediate-depth wells, completed with 20 feet of screen extending to total depths of 100 to 173 feet. One well is designated as a deep well, completed with 20 feet of screen extending to a total depth of 230 feet. The deep well was completed near the base of the basalt sequence. A production well, PW-10, located near the plant, was drilled to a total depth of 250 feet, which was interpreted to be within the basalt sequence (cross section F'-F" of the RI). The Salt Lake Formation was encountered in core hole CH-3 at a depth of 231 feet below surface.

Changes in depths to groundwater in wells demonstrate cyclic periods of high and low groundwater levels in response to seasonal changes in recharge. Water levels are typically higher by about 2 to 3 feet in the spring compared to levels measured in the fall. Longer term cycles are also apparent with water levels responding to periods of drought lasting several years. Groundwater levels dropped 5 to 8 feet between 1997 and 2001 and have recovered several feet between 2004 and 2007 towards the range of levels observed in 1997. Groundwater pumping at

Monsanto has also resulted in apparent long-term water level declines, primarily on the west side of the site.

The direction and rate of groundwater flow beneath the site is influenced locally by heterogeneities in hydraulic conductivities within the basalts, with higher conductivities found in the basalts on the east side of the site. The flow direction is also affected by groundwater pumping from Monsanto, located west of the property. Instead of flowing south as the regional aquifer does, groundwater flow in the aquifer beneath the west side of the site is to the west toward Monsanto's production wells. A vertical downward gradient is noted on the west side in off-site wells KM-15 and KM-19. This downward gradient may also be due to the influence of pumping the lower part of the basalt aquifer at Monsanto's production wells. Outside the area of influence of the Monsanto wells, flow is to the southwest and south. Groundwater levels beneath the east side of the facility have a more southwesterly flow component, consistent with regional flow patterns. Faults do not appear to be barriers to flow, but may locally increase both vertical and horizontal hydraulic conductivities.

4.0 COC Trends

COC concentration decay trends are documented through temporal changes observed in the existing monitoring well network used in conjunction with the Evergreen, Monsanto, and spring surface water data. Of the six COCs, TBP and TPH are present in very low concentrations on the site. Arsenic, manganese, molybdenum and vanadium exceed RBCs in several of the on-site wells but only molybdenum and vanadium are above the RBCs in off-site wells. Molybdenum is readily soluble in water and is more mobile than vanadium in groundwater. Molybdenum was present at the largest concentrations at Finch Spring when monitoring began in 1991. Increased vanadium concentrations were identified at Finch Spring after 1993.

5.0 Groundwater Model Review

Groundwater modeling was used in a comparative analysis of groundwater remedial action alternatives as part of the RI/FS (Dames & Moore, 1995b). The goals of the modeling evaluation were to address the following questions: 1) what magnitude of decrease in the concentrations of the six COCs would be expected over time when liquid sources were eliminated; and 2) would the magnitude of the decrease in COC concentrations be significantly increased over time if liquid source elimination (LSE) was supplemented by groundwater extraction. Answers to these questions were used to select a remedial action alternative for the site. Several combinations of groundwater remedial alternatives were evaluated ranging from no action to LSE with multiple extraction wells. Caveats listed for the model predictions were that the model was calibrated to within an order of magnitude of observed COC concentrations and should be considered reliable within that range of values. Even more specifically, a list of what the model was not intended to do included: evaluate the extent of contamination, simulate specific flow paths, simulate the exact pattern of flow, or predict the precise future concentrations at specific downgradient locations.

Based on the modeling results, the proposed remedial action alternative was LSE with additional solid source remedial actions including excavation and on-site disposal of S-X and scrubber pond solids, and reuse/recovery of the calcine tailings. With respect to question 1, the magnitude of decrease over time for this alternative was predicted to meet and decrease below risk-based concentrations or maximum contaminant levels within five years (see caveats and limitations listed above). With respect to question 2, no additional groundwater extraction was required.

A one-layer, two-dimensional model was constructed using the USGS MODFLOW program to simulate groundwater flow in the shallow aquifer covering an area of about 3.5 square miles (model domain). The model domain was oriented in the general direction of groundwater flow (southwest) with the plant facility placed near the center. Chemical transport was simulated using the MT3D software package integrated with the MODFLOW program. Backward modeling was used to simulate groundwater flow and contaminant transport between 1963 (plant startup) and 1995 (predicted date when remedy would be in place). Model output was calibrated to November 1992 groundwater flow patterns and May 1993 chemical concentrations. The calibrated model was then used as the basis for simulating a 30-year period of groundwater flow and transport, referred to as the forward model (between 1995 and 2025), with individual model runs used to predict changes in concentrations under the varying conditions of the proposed remedial alternatives..

In the backward model COCs entered the model through 1) recharge from direct seepage from the ponds, and 2) infiltration of precipitation which leached COCs from solid sources. In the forward model, for alternatives with LSE, all pond seepage stopped. After LSE, the only source of COCs assumed in the model was leachate generated when precipitation infiltrated through the solid sources.

Basic flow model and transport assumptions and limitations included:

- Groundwater movement in the saturated basalts and interflow sequences responded in a manner similar to one hydrostratigraphic unit that responded similar to unconsolidated aquifer materials.
- The Salt Lake Formation underling the basalts did not contribute to the groundwater in the basalts and could be modeled as an impermeable barrier.
- Mixing of seepage from the liquid sources and leachate from the solid sources occurred immediately through the entire saturated thickness of the aquifer.
- Four Monsanto production wells and one on-site production well (PW-10) were operated between 1963 and 1995 and were assumed to remain in operation throughout 2025. The rate of pumping of PW-10 was 350 gpm. The Monsanto wells were pumped at rates of 0.5, 500, 2,000, and 2,080 gpm. The wells were assumed to be fully penetrating in the shallow aquifer.
- The Hydrologic Evaluation of Landfill Performance (HELP) model was used to predict infiltration rates. The runoff fraction was set to zero because snowmelt and precipitation had not been noted to leave the active calcine tailings area in the form of runoff.

- Process-water and lysimeter-water analytical data were representative of initial concentrations for pond liquids and solid source leachates. (Some source concentrations were increased in the model to achieve better calibration.)
- Mass was accumulated in the model by adsorption to the aquifer matrix. Mass left the model through constant head boundaries and pumping wells.
- A global mass balance approach provided initial estimates of adsorption coefficients (Kd). (During modeling initial Kd values were slightly adjusted to improve calibration.)

In the discussion of the model in the Comparative Analysis Report (Dames &Moore, 1995), efforts were made to apply an overall conservative approach by using conservative model assumptions and conservative input values. Three examples of conservative model input values that were mentioned included: 1) using a smaller saturated thickness (100 feet instead of 200 feet) to reduce dilution and increase predicted concentrations downgradient, 2) using largest observed concentrations from a source area as representative of the entire area to increase predicted concentrations during forward modeling, and 3) using a higher infiltration rate (1 inch/year) to allow for greater mass of COCs to be leached from the solid sources and transported to the groundwater. Sensitivity analysis showed that the most sensitive input parameters to the model were aquifer thickness, infiltration, and solid source leachate concentration.

In 2008, 13 years post modeling, actual groundwater concentrations remain higher than predicted. Not all wells demonstrate decreasing trends. Changes in timing of remedial events, remedy options, and site conditions compared with those used in the model all had an effect on the current conditions. Upon review, some of the modeling input parameters may also have had a more profound influence on the predicted outcome.

Changes in timing of remedial events and remedy options include:

- LSE with excavation and on-site disposal of S-X and scrubber pond solids was completed in 1997, 2 years after the 1995 modeling date.
- The reuse/recovery of the calcine tailings was not effective and the FS was modified to include capping of the calcine tailings in place, which was completed in 2001, 6 years after the 1995 modeling date.
- The model assumed that the S-X ponds and scrubber ponds would have no infiltration after closure. The S-X and scrubber ponds did not have impermeable caps and would have infiltration and leaching after closure. Wells near the former S-X ponds have the largest concentrations of COC.
- The infiltration estimate assumed no runoff from the active calcine tailing. The capped calcine area has snow buildup and run off which is partially diverted to an infiltration basin, but also ponds near the former scrubber ponds.
- Ponded water is present during the spring around the former scrubber pond and on the S-X pond.
- On site production well PW-10 was no longer used for process water after 2000; limited pumping occurs in the summer for irrigation of landscaped areas.
- Adsorption coefficients for the metals were estimated at very low values compared to literature values. Vanadium has a published value of 1,000 ml/g (Table A-1 of the

Groundwater Modeling Report in the KMCC RI/FS), which is also the default valued used in the MAROS program, compared to 0.16 ml/g used in the model. Molybdenum has a published range from 0.4 to 4,000 ml/g from one source and a more limited range of 9 to 125 ml/g from other sources (Table A-1 listed above), compared to 0.31 used in the model. The default in the MAROS program for molybdenum is a Kd of 20 ml/g. Sensitivity ranges were also very low (0.08 and 0.32 ml/g for vanadium) when evaluated and the conclusion was made that Kd had low sensitivity in the modeling results.

- The effective porosity of 0.08 used in the model and 0.1 used to estimate the mass of COC adsorbed to the aquifer is low. By increasing porosity and adsorption, more mass is present in the model. In the sensitivity analysis only porosity was increased substantially (to 0.25 or 25 percent) and the result was increased predicted vanadium concentrations downgradient from the KMCC site at 5 years, but not a noticeable difference at 10, 20, or 30 years. The increase in porosity and not adsorption (less mass) essentially flushed the vanadium out of the model.
- The forced application of 100 feet for aquifer thickness to calibrate the transport model could be compensated by increasing porosity, infiltration, and leachate concentration. The reduction of aquifer thickness to 100 feet was done to achieve better agreement between predicted and observed/reported COC concentrations in on-site monitor wells and to match drawdown in Monsanto production wells.
- The Monsanto wells are screened from 190-255 feet, pulling from the bottom of the basalts. This deep pumping may explain the vertical downward gradient between paired wells.

6.0 Conceptual Site Models

Figure 1 is an Area Map showing site features referenced in Figures 2 and 3 (Figures located at the end of the report). Figures 2 and 3 are depictions of the current CSM for the hydrogeologic setting and COC transport processes. The base map for these two figures is an aerial map of the site area oriented to the northeast and tilted to the northwest to provide a 3-dimensional perspective. The surface was cut away at a diagonal, from the northeast corner of the plant (east of the reclaimed calcine tailings ponds) to the southwest corner of the Tronox property, crossing Highway 34 and ending at wells TW-11 and TW-12 on the adjacent Monsanto site. Site features such as the former ponds and plant area are labeled. The subsurface geology forms the third dimension in the diagrams and was constructed from geologic cross sections provided in the RI.

6.1 CSM for Hydrogeologic Setting

The subsurface geology shown in the CSM for the hydrogeologic setting was simplified from cross sections in the RI. The cross sections were originally interpreted from logs of borings for Monsanto wells TW-11 and TW-12 and Tronox wells and core holes KM-15, KM-18, KM-16, KM-8, PW-10, and CH-1. In the site model, the wells and core holes were placed at their intersections with the surface map and made to extend vertically to a projected depth of 300 feet. The wells were interconnected in what is typically referred to as a fence-diagram, where the surface between wells (fence section) changes direction depending on the spatial orientation of the section relative to the diagram. For example the section between Wells KM-15 and KM-16 is oriented southwest to northeast, whereas the section between KM-16 and KM-8 is oriented more south to north.

The thin, discontinuous layer of alluvium is shown on top where noted in borings. The five basalt flows and interflow zones are shown in their relative locations. In general, the basalt flows dip to the west and are offset by faults. Faults are projected from geologic features and seismic interpretations as shown on the cross sections. Water level elevation is interpreted from the cross section and is very general; it does not show variations in groundwater elevations.

The insert in Figure 2 shows the path of water moving in the broken, vesicular and scoriaceous materials at the tops and bottoms of flow beds, through interbedded sediments and through vertical joints in the dense basalt flows. Sources of water in the model are from infiltration from rainfall and snowmelt, pond seepage, and recharge from the aquifer. Water flow paths indicate horizontal flow with a vertical downward component induced by pumping wells at Monsanto. Faults are shown as zones of similar or slightly increased flow. The lower Salt Lake Formation was only detected in one core hole on site (CH-3); for the purpose of the CSM, it is interpreted to be near KM-16 and KM-8 and to have no interconnection with flow in the basalts.

6.2 CSM FOR COC TRANSPORT PROCESSES

Figure 3 shows a conceptual site model for COC transport processes. The same diagram base is shown as used in the CSM for the hydrogeologic setting. Stippling patterns show where COC may be present in the vadose zone beneath former ponds and the main plant site as well as in groundwater migrating downgradient from the site area. A slightly denser stippled pattern is shown beneath the former S-X pond, settling ponds, and plant area indicating areas with continued source leaching.

Contaminant flow paths are illustrated in two inserts in Figure 3. The first insert illustrates the main physical transport processes of advection, dispersion, and diffusion. The second insert shows reactions that affect the transport of COCs on a granular level including precipitation, adsorption, oxidation-reduction, ion exchange, bacterial degradation, complexation and chelation, colloidal transport, and decay.

7.0 MAROS Optimization Approach

The MAROS methodology assumes that the current sampling network adequately delineates the plume (bounding wells have non-detect values) and that the vertical and horizontal dimensions of the plume are characterized. The validity of the results relies on the extent and quality of input data. The MAROS user's guide (AFCEE, 2006) recommends that a conceptual site model be developed prior to the use of the MAROS software to provide more accurate site evaluation through quality data input. As the CSM evolves with increased knowledge of the site over time, the optimization can be updated to reflect these changes.

The MAROS optimization approach was used to evaluate the monitoring and remediation of the two primary COCs: vanadium and molybdenum. Data were compiled from the 13 Tronox monitoring wells with shallow completions (KM-1 through KM-9, KM-13, KM-15, KM-16, and KM-17). Two time periods were evaluated: 1) post LSE to the present - October 1997 through May 2008; and 2) the past 5 years (9 monitoring events) - May 2004 through May 2008.

The monitoring data from the site is collected and published semi-annually, and is accompanied by data validation reports. Although data have been collected since 1995, only data collected after October 1997 are considered representative of post-LSE conditions. Details of the monitoring data are discussed in the Groundwater Monitoring Network Evaluation (GET, 2008). The MAROS guide provides data evaluation strategies and statistical techniques to reduce the probability of making false positive and false negative decisions arising from uncertainty in the sample data. These evaluations were not performed as part of this study as the Tronox monitoring data are considered useable with no significant comparability issues, outliers, or data management problems.

Based on given site details the MAROS program was used to perform a statistical plume analysis, spatial moment analysis and MAROS analysis. Table 1 provides a list of input parameters, values, and justification for use in the MAROS program. Values for input parameters were based on the site characterization from the RI and from values used in the groundwater model with the exception of porosity and adsorption coefficients. A larger value for porosity (0.2 compared to 0.08 used in the model) was used to represent flow through broken basalt and interflow sediments. Similarly, larger values for adsorption coefficients for vanadium (1000 ml/g compared to 0.16 ml/g) and molybdenum (20 ml/g compared to 0.31 ml/g) were used as the larger values were default values programmed into MAROS. Porosity is used in the calculation of seepage velocity and both porosity and adsorption coefficients are used in the spatial moment analysis.

Table 7.1 MAROS Input Parameters

Hydrologic Parameters	Value	Units	Justification
Seepage Velocity (ft/yr)	5475	ft/year	Calculated from Ki/n(365days/yr)
Hydraulic Conductivity (K)	150	ft/day	RI average value
Gradient (i)	0.02	ft/ft	RI average value
Porosity (n)	0.2	--	effective porosity for sand**
SaturatedThickness	100 (200)	ft	RI range of thicknesses
Groundwater flow direction	SW	240 degrees*	Semi-annual monitoring
GW Fluctuations	yes	--	Semi-annual monitoring
COC	**Value**	**Units**	
RBC Vanadium	0.26	mg/L	RI
RBC Molybdenum	0.18	mg/L	RI
Kd Vanadium	1000	ml/g	MAROS default
Kd Molybdenum	20	ml/g	MAROS default
Plume Information	**Value**	**Units**	
Plume Type	metals	--	RI
Current Plume Length	6000	ft	Semi-annual monitoring
Maximum Plume Length	6000	ft	Semi-annual monitoring
Plume Width	3500	ft	Semi-annual monitoring

Table 7.1 MAROS Input Parameters (continued)

Source Information	Value	Units	
Source Location near Well	PW-10	200 ft E/150 feet N	near top of plume/monitoring reps
Source X-Coordinate	659700	ft	Plant Grid
Source Y-Coordinate	372200	ft	Plant Grid
Source Treatment	LTM	--	Site Remedy 1997/2001
Well Information	**ID**		
Source Wells	KM-1 to KM-9, KM-13, KM-17		Inside Plant Facility Boundary
Tail Wells	KM-15, KM-16, Finch Spring		Outside Plant Facility Boundary
Centerline Wells	KM-8, KM-15, KM-16		Semi-annual monitoring
Down-gradient Information	**Value**	**Units**	
Distance from Source to Nearest:			
Downgradient receptor	5300	ft	Finch Spring
Downgradient property line	4000	ft	property line
Distance from Edge of Tail to Nearest:			
Downgradient receptor	-700	ft	Finch Spring
Downgradient property line	-2000	ft	property line

*direction from x-axis (counterclockwise)
**EPA (1996)-BIOSCREEN

7.1 Statistical Plume Analysis

The statistical plume analysis is an evaluation of plume stability based on concentration changes over time using the Mann-Kendall test and linear regression analysis. Linear regression is commonly used to analyze concentration trends over time assuming the data follow a typical logarithmic decrease, or decay in concentration. However, where there are outliers in the data (high or low concentrations from a single monitoring event) the estimated slope in the linear regression can be biased.

The Mann-Kendall test is a non-parametric statistical procedure used to analyze data that do not follow a normal distribution. The Mann-Kendall statistic (MK(S)) is derived from the differences in concentrations between consecutive sample results. A positive value (+1) is assigned if there is an increase in concentration, a zero value (0) if there is no change, and a negative value (-1) if there is a decrease in concentration. The Mann-Kendall statistic is defined as the sum of the number of positive differences minus the number of negative differences. The strength of the trend is proportional to the magnitude of the MK(S). The confidence in the trend is the statistical probability that the constituent concentration is increasing ($S>0$) or decreasing ($S<0$) and is calculated using a Kendall probability table. A relative concentration trend is assigned based on the relationship between the Mann-Kendall statistic and the confidence in the trend. The concentration trend classifications include increasing, probably increasing, no trend, stable, probably decreasing, and decreasing. The difference between no trend and a stable trend is based on the coefficient of variation (COV), which is a statistical measure of how the data vary about the mean value. Values larger than 1 indicate that the data show a greater degree of scatter about the mean. Values less than 1 indicate that the data form a close group about the mean value.

Table 7.2 MAROS Mann-Kendall Analysis Decision Matrix

Mann-Kendall Statistic	Confidence in Trend	Concentration Trend
S>0	> 95%	Increasing
S>0	90-95%	Probably Increasing
S>0	<90%	No Trend
S≤0	<90% and COV ≥1	No Trend
S≤0	<90% and COV <1	Stable
S≤0	90 – 95%	Probably Decreasing
S≤0	>95%	Decreasing

Linear Regression is a parametric statistical procedure that interprets the log slope of the regression line that best fits data over time. This approach is used when there is a normal distribution of the data. The log-slope measures the trend in the data. Positive values indicate an increase in constituent concentrations over time, whereas negative values indicate a decrease in concentrations over time. The confidence in the trend is a statistical probability that the constituent concentration is increasing (log slope >0) or decreasing (log slope<0). Low levels of confidence in the fit correspond to "stable" or "no trend" conditions, while higher levels of confidence indicate the stronger likelihood of an increasing or decreasing trend. The COV is used to distinguish between stable and no trend conditions for negative slopes.

Table 7.3 MAROS Linear Regression Analysis Decision Matrix

Log Slope	Confidence in Trend	Concentration Trend
Positive	> 95%	Increasing
Positive	90-95%	Probably Increasing
Positive	<90%	No Trend
Negative	<90% and COV ≥1	No Trend
Negative	<90% and COV <1	Stable
Negative	90 – 95%	Probably Decreasing
Negative	>95%	Decreasing

7.2 Spatial Moment Analysis

The spatial moment analysis provides a relative measure of plume stability and condition. The zeroth, first, and second moments provide measures of mass, center of mass, and the spread of the plume at each sample event. Data required for this analysis include concentrations, spatial coordinates, saturated thickness, and porosity.

The zeroth moment shows change in mass over time. The zeroth moment is the sum of concentrations for all monitoring wells and is an estimate of the total dissolved mass in the plume. The 3-D zeroth moment is calculated from concentration; porosity; and x, y, z spatial coordinates. Because the wells are spatially discontinuous (locations do not form an exact grid pattern), a numerical approximation is used to estimate mass in three dimensions. A numerical integration is performed by dividing the horizontal plane (x,y) into contiguous triangular regions with the apex of each triangle defined by a well location (Delaunay Triangulation method). An approximation of mass is calculated as the sum of the mass in each triangular section, calculated as the product of the geometric mean concentration of each triangle, volume of the triangle (the average saturated thickness multiplied by the area of the triangle), and total porosity. The zeroth moment trend is determined by using the Mann-Kendall Trend Methodology using the Mann-Kendall Statistic (MK(S)), confidence in trend, and COV. Results for the trend include: increasing, probably increasing, no trend, stable, probably decreasing, and decreasing. Zeroth moment calculations can show high variability over time, largely due to fluctuating concentrations at the most contaminated wells.

The first moment shows changes in center of mass over time in two dimensions. The first moment estimates the coordinates (x,y) for the center of mass for each sample event. Similar to the zeroth moment calculation, a numerical approximation is required to evaluate the spatially discontinuous data. Analysis of the movement of mass is viewed as it relates to 1) the original source location of contamination and 2) the direction of groundwater flow. Spatial and temporal trends in the center of mass can indicate spreading or shrinking or transient movement based on season variation in rainfall or other hydraulic considerations. No appreciable movement or a neutral trend in the center of mass would indicate plume stability. The first moment trend of the distance to the center of mass over time is determined by using the Mann-Kendall Trend Methodology.

The second moment shows spread of the plume over time in two dimensions--spread in the x-direction and spread in the y-direction (also referred to as the third moment in the MAROS program). The second moment indicates the distribution of concentrations about the center of mass, or the distance of contamination from the center of mass for a particular COC and sample event. The spread of the plume is approximated in terms of an ellipse with the x-axis representing the major migration direction and the y-axis is the lateral spread. The second moment analysis uses the representative groundwater direction input into the program. The second moment trend of the spread of the plume over time is determined by using the Mann-Kendall Trend Methodology. The MK(S) measures the trend in the data. Positive values indicate an increase in the spread of the plume over time (expanding plume), whereas negative values indicate a decrease in the spread of the plume over time (shrinking plume). The strength of the trend is proportional to the magnitude of the MK(S).

7.3 MAROS Site Results Analysis

The preliminary step in the MAROS optimization is a qualitative evaluation based on site classification, source treatment, and monitoring system category. The second step in MAROS analysis is a well specific evaluation, discussed in the next section below. In the preliminary evaluation, overall trend results for both tail and source wells are used to assign monitoring system categories of extensive (E), moderate (M), and/or limited (L) to the monitoring system. Categories are assigned using a very simple decision matrix. If tail wells are increasing or probably increasing the site is assigned an E for extensive monitoring required, regardless of whether the source is increasing or decreasing. Similarly if there is no trend in the tail wells and the source has no trend, an increasing trend, or probably increasing trend, the site is assigned an E for extensive monitoring. If tail wells are decreasing or probably decreasing and source wells are either stable, probably decreasing or decreasing, the site is assigned an L for limited monitoring required. Other combinations fall into the system category of moderate monitoring required as shown on the diagram below.

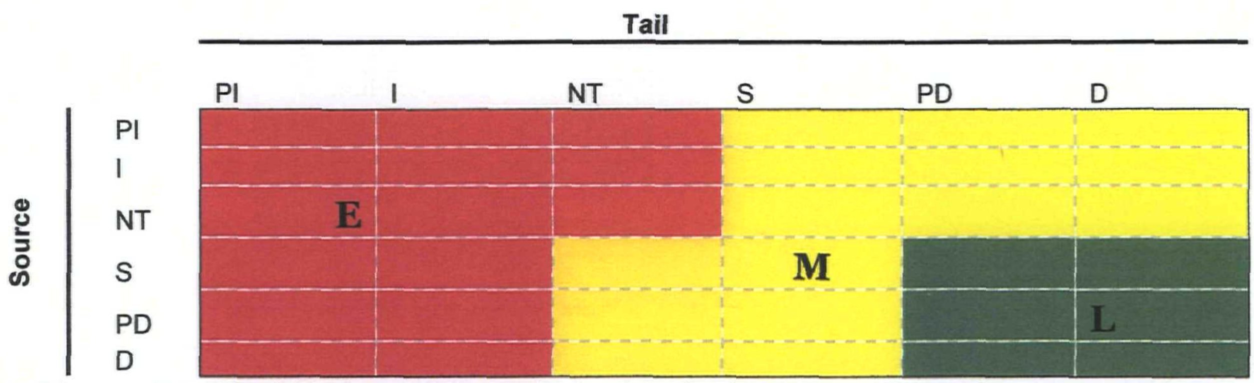


Diagram 7.1. Decision Matrix for Assigning Monitoring System Categories: Moderate(M); Extensive(E); Limited (L); Plume Stability: Increasing (I); Probably Increasing (PIU); No Trend (NT); Stable (S); Probably Decreasing (PD); Decreasing (D)

For frequency, MAROS again uses a simple decision matrix to indicate how often wells at the site should be sampled for adequate groundwater monitoring. Frequency determinations for sites with groundwater fluctuations and monitored natural attenuation are assigned sampling frequencies from quarterly to biennial (2 year interval) based on the monitoring system category and the time to receptor factor (distance to receptor over seepage velocity).

Table 7.4 Frequency Determination- Groundwater Fluctuations and MNA

TTR	Monitoring System Category		
	E	M	L
Close (TTR<2 yrs)	Quarterly	Quarterly	Biannually
Medium (2<TTR<5 yrs)	Quarterly	Biannually	Biannually
Far (TTR >5 yrs)	Biannually	Biannually	Annually

TTR: time to receptor (distance to receptor divided by seepage velocity)

For duration, MAROS uses a simple decision matrix to assess when the groundwater monitoring network should be reassessed for reducing the scope of the system or to stop monitoring altogether. This evaluation is not based on statistics but on experience of the authors. The sampling duration is determined by the Monitoring System Category as well as the length of the sampling record available. Sites with both deceasing Source and Tail results are suggested to end the sampling.

Table 7.5 Duration Determination for Sites with Monitored Natural Attenuation

Sampling Record	Source or Tail Trend Category			
	I or PI Trends	NT or N/A	S Trends	PD or D Trends
Small (<2 yrs)	Consider reassessment of network if concentrations begin to decrease	Insufficient data, continue sampling	6 more years	3 more years
Medium (2<TTR<5 yrs)	Consider reassessment of network if concentrations begin to decrease	Insufficient data, continue sampling	4 more years	2 more years
Large (>10 yrs)	Consider reassessment of network if concentrations begin to decrease	Insufficient data, continue sampling	2 more years	1 more year

For sampling density, MAROS uses an equation based on two large databases of historical plume data for petroleum based and chlorinated solvent plumes:

$$\text{Sampling density (number of wells)} = 1.5(\text{plumelength})^{0.4}$$

Where plume length is in feet and the sampling density is the number of wells for he entire plume. The user is cautioned to consider the well density in light of adequately defining/characterizing the plume through gathering sufficient site information.

7.4 MAROS Sampling Optimization Analysis

The MAROS sampling optimization is a rigorous detailed statistical approach to sampling optimization with modules to optimize sampling location by Delaunay Triangulation, and sampling frequency by the modified cost-effective sampling (CES) Method or Power Analysis. A third option for data sufficiency analysis is offered.

7.4.1 Optimizing Sampling Locations

The sampling location analysis determines sampling locations by the Delaunay method, removing redundant sampling locations from the monitoring network, and/or adding new sampling locations. In MAROS, Delaunay triangulation is first used to generate a grid for the studied site with well sampling locations as its nodes. The triangles are formed by connecting a well with its two closest neighbors (adjacent wells). A slope factor (SF) is generated for each triangle based on the concentration gradient estimated from the concentrations in the three wells. The slope factor is defined as the standardized difference between the concentration measured at a location and a concentration estimated from concentrations at its nearest neighbors. The magnitude of SF ranges from 0 to less than 1. A value of zero means that the concentration at a location can be exactly estimated by its surrounding locations, thus, sampling at this location provides no extra information influencing understanding of the plume. The larger the SF value of a location, the more importance is given to the well location.

To ensure that the elimination of sampling locations from a monitoring network will not cause significant information loss, two indicators were developed to measure the information loss: the average concentration ratio (CR) and the Area Ratio (AR). The average concentration ratio is the average plume concentration estimated after elimination of locations in the current step of optimization divided by the average plume concentration estimated from the original network before elimination of any locations. The Area Ratio is the triangulation area based on location after elimination of location in the current step of optimization divided by the triangulation area from the original network. The optimization process is iterative; where the process repeats until significant information loss occurs. The user can determine the threshold levels for the SF and the area and concentration ratios. The following matrix illustrates the elimination process:

Table 7.6 Decision Process of the Elimination of a Location

Sampling Location Elimination Status		
Interpretation	**SF→0 (Perfect estimation)**	**SF→1 (High estimation error)**
CR or AR far from 1	Keep	Keep
CR→1 and AR→ 1 (less information loss)	Eliminate	Keep

7.4.2 Well Redundancy Analysis: Delaunay Method

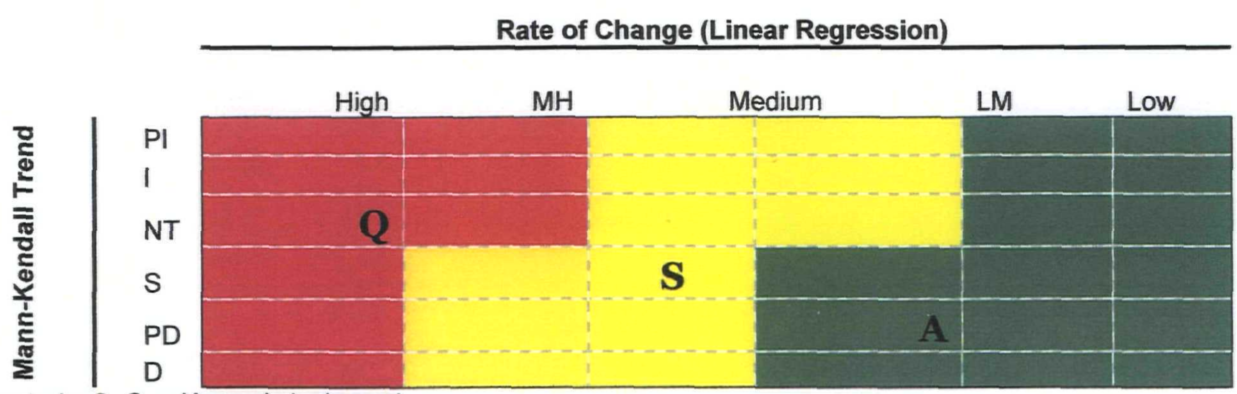
The MAROS program offers options for well redundancy analysis. The user can choose to select sampling events for analysis. If one sampling event is selected an Excel module with a graphical interface can be applied. If the access module of the Delaunay method is selected the user can select whether or not a well should be removed from the analysis. For example, a sentinel well might be removed since it cannot be eliminated as redundant. The well redundancy module provides default threshold values for parameters including inside node slope factor (SF), Hull node slope factor, Area Ratio (AR), and Concentration Ratio (CR). These default values can be changed. One or more COCs can be used in the analysis. The option to compare across COCs can identify wells to keep if they are sensitive to one or more COCs.

7.4.3 Well Sufficiency Analysis

Well sufficiency analysis is provided to identify areas where new wells could enhance the spatial plume characterization. This method uses the SF values from the location optimization to assess the concentration estimation error or uncertainty in areas within the network. Among these potential areas, those with a high estimation error may be designated as regions for new sampling locations or increased monitoring intensity. Each Delaunay triangle in the triangulated monitoring network is used as a potential area for new sampling locations. Estimated SF values at these potential areas reflect the concentration estimation error at these regions for the time period specified by the sampling events. The estimated SF values are classified into four levels: S-Small (<0.3), M-Moderate (0.3-0.6), L-Large (0.6-0.9), and E-Extremely large (>0.9). The potential areas with Extremely Large or Large levels are candidate regions for new sampling locations. New sampling location can be placed inside these regions (for example at the centroid of the triangle). Professional judgment must be used to decide whether an area for new sampling locations makes sense based on the hydrogeologic site conditions. Note that clustered well sets cannot be evaluated using the two-dimensional Delaunay method. The representative well from the well cluster should be used such as the one screened in the representative aquifer interval within the same geologic unit.

7.4.4 Sampling Frequency Analysis

In MAROS, the modified CES method is used to evaluate the sampling frequencies at wells for each COC. The modified CES method is designed to set the sampling frequency for a well based on the analysis of time series concentration data at each sampling location, considering both recent trends and long-term trends of the concentration data. The central premise of the CES method is that sampling frequency should be based on the rate of change of constituents at the well rather than well location within the plume. The lowest rate of change, 0-10 ppb per year, is assigned an annual frequency schedule. The highest rate, 30+ ppb, is assigned to a quarterly schedule. Rates of change in between these end points are qualified by variability information, with higher variability leading to a higher sampling frequency. Variability is characterized by a distribution-free version of the coefficient of variation; the range divided by the median concentration with 1.0 as the cut-off threshold. Concentration Trend (CT) is determined by Mann-Kendall analysis. Consistent with the other analytical methods, the Mann-Kendall trend results fall into the same six categories: Decreasing)D), Probably Decreasing (PD), Stable (S), No Trend (NT), Probably Increasing (PI), and Increasing (I). The COV and confidence in trend are used to determine the trend category. Rate of Change (ROC) parameters used for determining the linear trends of COC were generalized to include all possible ranges. The ROC parameters are placed into five categories: Low (L), Low-Medium (LM), Medium (M), Medium-High (MH), and High (H). The ROC is the slope of the line that best fits the data as determined by linear regression. Clean-up goal or primary remediation goal (PRG) is user defined. A low rate of change is, by default, one-half the PRG. The medium rate is the PRG. The high rate is twice the PRG. For wells with sufficient data to determine a trend and low rates of change, annual sampling is recommended. Wells with high rates of change are assigned default quarterly monitoring. The diagram below is a decision matrix illustrative of the results.



Quarterly; S- SemiAnnual; A- Annual

Diagram 7.2. Decision Matrix for Determining Frequency

7.4.5 Data Sufficiency Analysis

Data sufficiency analysis in MAROS includes two methods of statistical power analysis: power analysis for individual well cleanup status and risk-based power analysis for site cleanup evaluation.

Individual Well Cleanup Status

The stability or trend of the contaminant plume must be considered before testing the cleanup status for individual wells. Applying the analysis to wells in an expanding plume may cause incorrect conclusions and is less meaningful. In long-term monitoring the site may require many years to attain site cleanup. Individual wells become clean gradually, beginning with the tail wells and followed by the source wells.

Two tests for the cleanup status of wells are provided in the MAROS program: a modified sequential t-test and a student's t-test. Power analyses parameters involved in the evaluation include:

- PRG,
- target levels - default value set to 0.8 times the PRG (used only in the sequential t-test),
- alpha level - significance level set at 0.05,
- target power - the desired statistical power of all statistical tests in MAROS Data Sufficiency Analysis (default value set to 0.80).

Results from the sequential t-test and the Student's-t test (optional power analysis) include cleanup status, power, and expected sample size for each well (yearly averages or original data), calculated for normal and lognormal distributions.

The "cleanup achieved" parameter from the sequential t-test is designated as "attained" if the mean concentration is significantly below the cleanup goal and has achieved the Target Level. The designation of "not attained" indicates the mean concentration is higher than the cleanup goal. "Continue sampling" indicates that although the mean concentration is below the cleanup goal it is not statistically significant because either 1) the mean concentration does not achieve the Target Level, or 2) the existence of large data variability prevents the test from resulting in significance.

The "Significantly < Cleanup Goal" parameter from the Student's t-test is assigned "yes" if the mean concentration is significantly below the cleanup goal, supported by a power equal to or greater than 50%. A "no" result indicates the mean concentration is either 1) higher than the cleanup goal, or 2) below the cleanup goal but not statistically significant because the existence of large data variability prevents the test from resulting in significance. The power of test is the probability that a well is confirmed to be clean when the mean contaminant concentration is truly below the cleanup goal. The expected sample size is the number of samples required to achieve the expected power with the variability shown in the data. Smaller values indicate smaller data variability and higher statistical power.

Risk-based Power Analysis

The use of risk-based goals in managing contaminated sites requires that cleanup standards be met at the compliance boundary. The risk-based power analysis for site cleanup evaluation is a sufficiency analysis at the compliance boundary. Three steps are performed in order to predict concentrations at the compliance boundary. First, centerline wells are chosen and a regression analysis is performed on the concentrations versus distance to the compliance boundary using an exponential model. Second, concentrations for each monitoring well are projected to the compliance boundary using the exponential model. Third, the group of projected concentrations at the compliance boundary is evaluated by statistical power analysis. Two types of data can be used for the regression analysis: 1) data from monitoring well points located on or close to the centerline (minimum of three wells), and 2) data estimated from hypothetical sampling points on the centerline through plume contouring. The first type is used in the risk-based power analysis. The compliance boundary is assumed to be a line perpendicular to the preferential groundwater flow direction and is located at or upgradient of the nearest downgradient receptor.

To determine the site cleanup status, a significance test is used where t is the test statistic following t distribution with n-1 degrees of freedom. The significance of the site cleanup test is found by comparing the test statistic t with the critical t value under significance level alpha. The site cleanup status, power, and expected sample size for each sampling event with at least six projected concentrations are calculated under both normal and lognormal assumptions. When a sampling event has less than six projected concentrations (N/C-not conducted due to insufficient data) or the mean projected concentration is higher than the cleanup goal (S/E- sample mean significantly exceeds cleanup goal) the analysis is not conducted.

Cleanup is achieved signifies, the mean projected concentration at the compliance boundary is below the cleanup level with statistical significance. Results are reported as Attained, Not Attained, or NC (due to insufficient data). The power of test is the probability that the site is confirmed to be clean when the projected mean concentration level at the compliance boundary is truly below the cleanup goal. The expected sample size is the number of projected concentrations (the number of wells) required to achieve the expected power (i.e. 0.80) with the variability shown in the projected concentrations.

7.5 Empirical Data

MAROS allows the user to enter external plume information including statistical modeling results other than Mann-Kendall or Linear Regression. This option was not used in the current analysis.

8.0 Results of MAROS optimization

Results from the MAROS analysis are presented for the general COC assessment, plume analysis, spatial moment analysis, MAROS analysis, sampling location optimization, sampling frequency optimization, risk-based analysis, and plume centerline regression analysis.

Concentration data were evaluated for the two major COCs, molybdenum and vanadium. Well data used in the analysis included all 13 monitoring wells with shallow completions and Finch Spring data. Sampling events were divided into three groupings: 1) all post LSE data from November 1997 to May 2008; 2) yearly averages of post LSE data from November 1997 to May 2008; and 3) recent data from May 2004 to May 2008 (nine monitoring events). Reports from the MAROS analysis are presented in Appendices A, B, and C, respectively.

8.1 COC Assessment

This assessment provides a qualitative evaluation of relative toxicity, prevalence and mobility for each COC and provides a relative ranking of importance. Toxicity is determined by examining a representative concentration (geometric mean) for each compound over the entire site. The compound representative concentrations are then compared with the chosen PRGs and a percentage excedences from the PRGs provide the compounds' relative toxicity. Prevalence is determined by examining a representative concentration for each well location compared to the PRG and calculating the percentage of total excedences compared to the total number of wells. Mobility is based on the magnitude of the default values for adsorption coefficient (a lower Kd value signifies increased mobility). By comparison, molybdenum was ranked as more toxic, more prevalent, and more mobile than vanadium.

Table 8.1 MAROS COC Assessment Summary

Toxicity COC	**Representative Concentration (mg/L)**	**PRG (mg/L)**	**Percent Above PRG**	
Molybdenum	6.2	0.18	3347.70%	
Vanadium	3.6	0.26	1301.90%	
Prevalence COC	**Total Wells (and Spring)**	**Total Excedences**	**Percent Excedences**	**Total Detects**
Molybdenum	14	13	92.90%	14
Vanadium	14	11	78.60%	14
Mobility COC	**Kd ml/g**			
Molybdenum	20			
Vanadium	1000			

8.2 Plume Analysis Summary

The plume analysis summary Table 8.2 provides a statistical analysis for each COC per well. Mann-Kendall trends and linear regression trends are listed for three groupings: 1) post LSE trends from1997 to 2008; 2) post LSE trends from 1997 to 2008 with annual time consolidation; and 3) recent trends from 2004 to 2008. KM-1 was dropped from the evaluation due to insufficient data.

Table 8.2 Plume Analysis Summary

Molybdenum

Wells	Mann-Kendall 1997-2008 all data	Mann-Kendall 1997-2008 yearly	Mann-Kendall 2004-2008 all data	Linear Regression 1997-2008 all data	Linear Regression 1997-2008 yearly	Linear Regression 2004-2008 all data	Range of Trends
KM-2	D	D	D	D	D	D	D
KM-3	D	D	D	D	D	D	D
KM-4	D	D	D	D	D	D	D
KM-5	D	D	NT	D	D	I	D,NT,I
KM-6	D	D	NT	D	D	NT	D-NT
KM-7	D	D	D	D	D	D	D
KM-8	D	D	NT	D	D	NT	D-NT
KM-9	D	D	PD	D	D	PD	D-PD
KM-13	D	D	D	D	D	D	D
KM-15	D	D	D	D	D	PD	D-PD
KM-16	D	D	S	D	D	S	D-S
KM-17	D	PD	D	D	PD	D	D-PD
Finch Spring	D	D	D	D	D	D	D

Vanadium

Wells	Mann-Kendall 1997-2008 all data	Mann-Kendall 1997-2008 yearly	Mann-Kendall 2004-2008 all data	Linear Regression 1997-2008 all data	Linear Regression 1997-2008 yearly	Linear Regression 2004-2008 all data	Range of Trends
KM-2	D	D	NT	D	D	NT	D-NT
KM-3	S	S	S	S	S	S	S
KM-4	D	PD	I	D	D	PI	D,PD,PI,I
KM-5	D	D	S	D	D	S	D-S
KM-6	D	D	NT	D	D	NT	D-NT
KM-7	D	D	D	D	D	PD	D-PD
KM-8	PI	NT	S	I	I	D	D,NT,S,PI,I
KM-9	D	D	D	D	D	D	D
KM-13	D	D	D	D	D	D	D
KM-15	D	D	S	D	D	S	D-S
KM-16	D	D	S	D	D	D	D-S
KM-17	S	PD	NT	S	S	NT	PD,NT,S
Finch Spring	PI	PI	S	I	I	S	S,PI,I

I - increasing; PI - probably increasing; S - Stable; PD - probably decreasing; D - decreasing; NT - no trend

Tan highlighted area indicates significant variation in trend or increasing trend

In general, most trends in wells indicate decreasing concentrations. Overall trends for molybdenum, since the LSE, are decreasing or, in the case of KM-17 (with the yearly consolidation), probably decreasing. However, trends for the past 5 years show more variability, especially in KM-5 (NT and I), KM-6 (NT), and KM-8 (NT). The increasing trend designation for KM-5 is influenced by one comparatively high concentration (0.3 mg/L) from Spring 2006; whereas the remaining concentrations (0.06 to 0.2 mg/L) are very near or below the PRG of

0.18mg/L. Concentration trends in KM-6 (1.1 to 2.0 mg/L) and KM-8 (2.5 to 4.9 mg/L) are relatively flat; however, with respect to the PRG of 0.18 mg/L the concentrations remain high.

Vanadium trends show more variability than trends for molybdenum. In general the overall trends for vanadium, since the LSE, are decreasing, probably decreasing, to stable. Three wells (KM-4 and KM-8) and Finch Springs had designations of probably increasing to increasing. Well KM-4 showed decreasing to probably decreasing trends when all data were analyzed post LSE; only trends for the past 5 years showed probably increasing to increasing. KM-8 had the exact opposite trends with probably increasing, increasing and no trends for the post LSE time period, and stable or decreasing trends for the past 5 years. For Finch Spring, the larger data sets showed probably increasing to increasing trends, whereas the past 5 years shows a stable trend.

8.3 Spatial Moment Analysis

Table 8.3 shows trend designations used in the spatial moment analysis for each COC.

Table 8.3 Moment Analysis

Molybdenum	1997 - 2008 all data	1997 - 2008 yearly trends	2004 - 2008 all data	Trends
Zeroth Moment: Mass	D	D	D	D
1st Moment: Distance to Source	NT	NT	PD	NT-PD
2nd Moment: Sigma XX	PD	D	D	D-PD
3rd Moment: Sigma YY	S	S	D	D-S
Vanadium	**1997 - 2008 all data**	**1997 - 2008 yearly trends**	**2004 - 2008 all data**	**Trends**
Zeroth Moment: Mass	D	D	NT	NT-D
1st Moment: Distance to Source	NT	NT	S	NT-S
2nd Moment: Sigma XX	D	D	NT	NT-D
3rd Moment: Sigma YY	S	NT	NT	NT-S

I - increasing; PI - probably increasing; S - Stable; PD - probably decreasing;
D - decreasing; NT - no trend

In the zeroth moment analysis, molybdenum was assigned a decreasing trend for the change in mass over time. The first moment shows NT in the larger data set and a possibly decreasing trend in the past five years for the distance from the center of mass over time relative to the original source. Note that several source areas are present at the site and a limitation of the MAROS program is that a single source location (x,y) per COC had to be selected as representative of the entire plant area; this source area was placed near the center of the plant by production well PW-10 for both molybdenum and vanadium. The second moment analysis shows the spread of the plume downgradient over time as probably decreasing to decreasing. The third moment analysis shows the spread of the plume cross-gradient over time as stable with the larger data set and decreasing with data from the past five years.

In the zeroth moment analysis, vanadium was assigned a decreasing trend for the change in mass over time using all the post LSE data and no trend for the past five years. The first moment shows no trend in the larger data set for the distance from the center of mass over time relative to the original source; the trend is stable for data from the past five years. The second moment analysis shows a decreasing trend for the spread of the plume downgradient over time using the post LSE data; the five year data shows no trend. The third moment analysis shows the spread of the plume cross-gradient over time as stable to no trend for the yearly consolidated data and the past five years.

8.4 MAROS Site Results

The MAROS Site Results are preliminary optimization results based on site classification, source treatment and monitoring system category.

Table 8.4 MAROS Site Results

Molybdenum	1997 - 2008 all data	1997 - 2008 yearly trends	2004 - 2008 all data	Trends
Tail Stability	D	D	PD	D-PD
Source Stability	D	D	PD	D-PD
Level of Effort	L	L	L	L
Sampling Duration	End Sampling	End Sampling	Sample 2 more years	End-2 more years
Sampling Frequency	Close Site	Close Site	Semi-Annual	Close/Semi-Annual
Sampling Density	>50	>50	>50	>50
Vanadium	**1997 - 2008 all data**	**1997 - 2008 yearly trends**	**2004 - 2008 all data**	**Trends**
Tail Stability	PD	PD	S	PD-S
Source Stability	PD	PD	S	PD-S
Level of Effort	L	L	M	L-M
Sampling Duration	Sample 1 more year	Sample 1 more year	Sample 4 more years	1-4 years
Sampling Frequency	Semi-Annual	Semi-Annual	Quarterly	semi-annual/quarterly
Sampling Density	>50	>50	>50	>50

Plume Status: I-increasing; PI-probably increasing; S-Stable; PD-probably decreasing; D-decreasing; NT-no trend
Design Categories: (E) Extensive; (M) Moderate; (L) Limited

For molybdenum, MAROS optimization shows tail and plume decreasing in the post LSE data set, but a more conservative probably decreasing for data from the past five years. The recommendation for the smaller data set is at least two more years of sampling on a semi-annual basis.

For vanadium, MAROS optimization shows tail and plume probably decreasing in the post LSE data set, and a stable designation for data from the past five years. The recommendation for the smaller data set is one to four more years of quarterly sampling. See the more detailed MAROS sampling frequency optimization below.

8.5 Sampling Location Optimization

The MAROS sampling location optimization was performed for individual COCs and all COCs. Results for molybdenum showed that all 12 wells and Finch Spring should be included in the sampling plan. Results for vanadium showed that three wells could possibly be eliminated from the sampling plan: KM-3, KM-6, and KM-7. Overall results were maintained when these three wells were eliminated. However, the combined consideration is that all sampling locations should be maintained.

8.6 Sampling Frequency Optimization

Sampling frequency optimization was performed for individual COCs. Sampling locations with the largest changes over time were identified for increased sampling frequency. For molybdenum, the only well that fit the criteria for a high rate of change was KM-8, which was set to the highest, quarterly sampling, interval based on current data (past nine events) All other wells were set to annual sampling.

Table 8.5 Sampling Frequency Optimization Results

Molybdenum

Wells	1997-2008 all data	1997-2008 yearly trends	2004-2008 all data
KM-2	Annual	Annual	Annual
KM-3	Annual	Annual	Annual
KM-4	Annual	Annual	Annual
KM-5	Annual	Annual	Annual
KM-6	Annual	Annual	Annual
KM-7	Annual	Annual	Annual
KM-8	Annual	Annual	Quarterly
KM-9	Annual	Annual	Annual
KM-13	Annual	Annual	Annual
KM-15	Annual	Annual	Annual
KM-16	Annual	Annual	Annual
KM-17	Annual	Annual	Annual
Finch Spring	Annual	Annual	Annual

Vanadium

Wells	1997-2008 all data	1997-2008 yearly trends	2004-2008 all data
KM-2	Annual	Annual	Annual
KM-3	Annual	Annual	Annual
KM-4	Annual	Annual	Quarterly
KM-5	Annual	Annual	Annual
KM-6	Annual	Annual	Annual
KM-7	Annual	Annual	Annual
KM-8	Quarterly	Quarterly	Annual
KM-9	Annual	Annual	Annual
KM-13	Annual	Annual	Annual
KM-15	Annual	Annual	Annual
KM-16	Annual	Annual	Annual
KM-17	Annual	Annual	Annual
Finch Spring	Annual	Annual	Annual

Tan highlighted areas indicate significant variation in frequency.

For vanadium, Well KM-4, with a high rate of change, was set to quarterly sampling based on the past nine sampling events. Data from KM-8 in the larger data set specified quarterly sampling. The smaller data set from the past nine events had a lower rate of change and the frequency was set at annual.

8.7 Data Sufficiency Analysis

Data sufficiency analysis in MAROS includes two methods of statistical power analysis: power analysis for individual well cleanup status and risk-based power analysis for site cleanup evaluation. The individual well cleanup status also includes an optional analysis as described in the section above.

Individual well cleanup status by the power analysis was performed for each COC. For molybdenum, results showed that the 12 wells and Finch Spring have "not attained" cleanup status assuming a lognormal distribution. For vanadium, Finch Spring and Well KM-17 were designated as "attained" cleanup. The optional analysis had similar results. Wells were ranked as S/E indicating the sample mean significantly exceeds the cleanup goal for molybdenum. For vanadium, Finch Spring and KM-17 were the only two sampling locations designated as having concentrations significantly less than the cleanup goal. Note that according to the database, Finch Spring and KM-17have never had reported concentrations that exceeded PRGs.

The MAROS risk-based power analysis for site cleanup evaluation is a sufficiency analysis at the compliance boundary computed for each COC. For the purpose of this evaluation the compliance boundary was deemed the projection of the southern property boundary on the plume centerline, or 4,000 feet downgradient from the designated source location and approximately 2,000 feet upgradient (-2,000 feet) from the tail edge of the plume, as shown on Figure 1. Results indicated that cleanup status projected at the property boundary, assuming a lognormal distribution of the data, was not attained for either molybdenum or vanadium.

9.0 Conclusions and Recommendations

The purpose of the MAROS evaluation was used to assess the adequacy of the monitoring network in characterizing the migration of COCs. To prepare for the evaluation the existing LTM program was documented, the groundwater modeling for the RI was critically reviewed, and the CSM was updated to reflect current understanding of site hydrogeologic conditions and transport processes. This preliminary evaluation was used to define and justify hydrogeologic input parameters and physical site parameters used in the program. The details and dynamics of the complex hydrogeologic system and contaminant transport processes had to be simplified to accommodate the two- and three-dimensional statistical and analytical calculations. The two main COCs at the site, molybdenum and vanadium, were used to represent contaminant trends in the evaluation:

The MAROS program provided the following:

- Plume analysis
- Spatial moment analysis
- MAROS preliminary evaluation
- Optimization for sampling location and frequency
- MAROS data sufficiency analysis of cleanup by individual well and site

Results from the plume analysis and spatial moment analysis indicate that both molybdenum and vanadium plumes have decreased since LSE was performed in 1997. Concentrations in most wells show a decreasing trend with few exceptions. Recent data, within the past five years, reflect a slower rate of change, with some wells reaching a flat slope showing no trend or even a slightly increasing trend. Both the plume and spatial moment analysis illustrate that molybdenum and vanadium have different reactions and migration patterns in the subsurface. Spatial and temporal variations can be attributed to natural variability inherent in any complex subsurface system. Physical changes in plant operations and movement of solid sources to different site locations have likely resulted in some small changes in trends in the data. However, the statistical evaluation shows a high degree of confidence in the overall trend designations.

The MAROS preliminary evaluation of the monitoring program suggested that the decreasing trends in molybdenum and vanadium could indicate a decrease in sampling duration and frequency is justified. The optimization of sampling location and frequency concluded that all sampling locations are valid but sampling frequency could possibly be reduced in select wells. The reduction in frequency to annual in some wells and an increase to quarterly in others (KM-4 and KM-8) was based on individual COCs and is not practical to implement. However, sensitive wells were identified that require attentive data evaluation.

The MAROS data sufficiency analysis of cleanup by well and site confirmed that cleanup has not been attained and may take several years to achieve.

In conclusion, the numerical and statistical evaluation of the LTMO program at Tronox was advantageous in establishing guidelines and techniques that can be used in the future. The combination of the statistical approach with professional judgment provides confidence in the direction of continued LTM as a remedy for COCs in groundwater. The LTMO process should be applied to site data periodically to look for potential reductions in scope and cost of the existing program while maintaining quality and effectiveness. No changes to the sampling program are recommended at this time.

10.0 References

AFCEE, 2006a. Final Long-Term Monitoring Optimization Guide, Version 1.2. HQ Air Force Center for Environmental Excellence, Environmental restoration Division (AFCEE/TDE), November 2006, 64 p.

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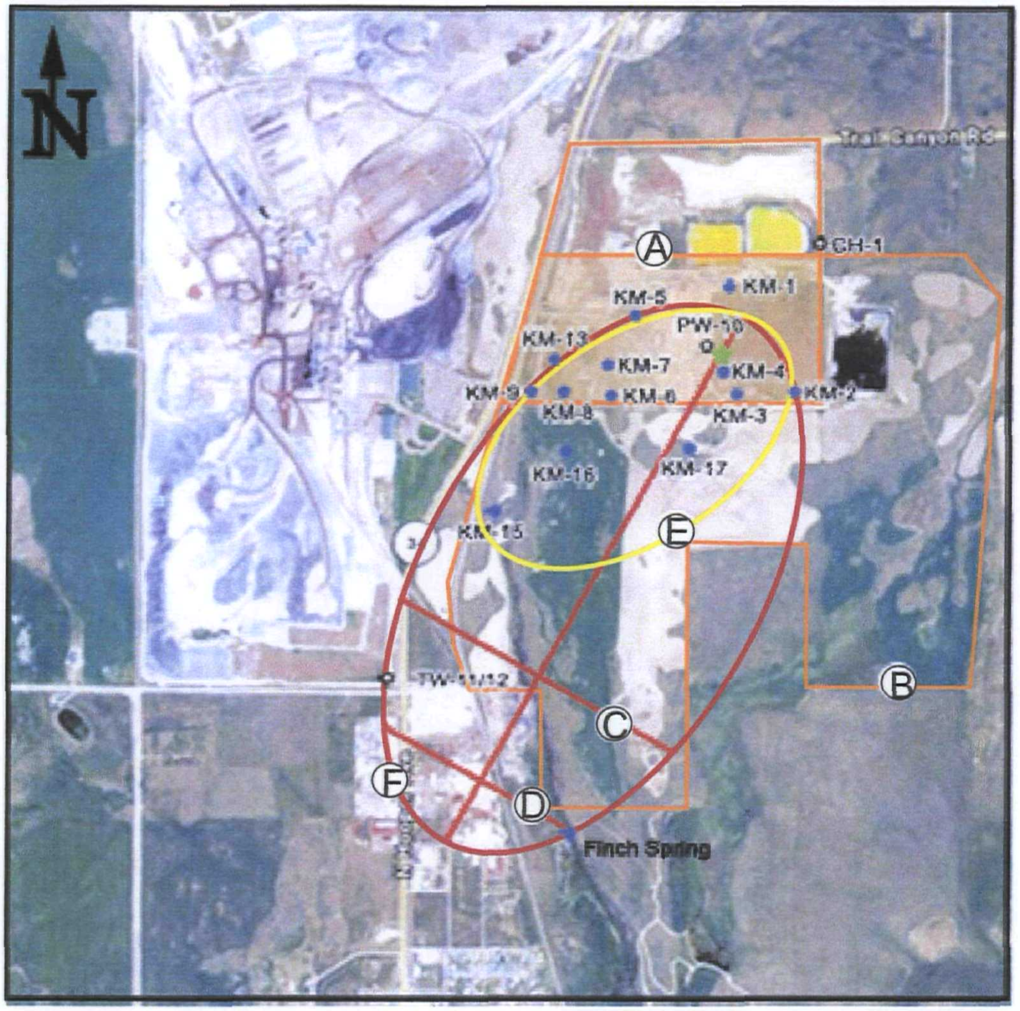
U.S. Environmental Protection Agency, 2008. Addendum 1 to the Statement of Work of Remedial Design/Remedial Action Consent Decree for Kerr-McGee Superfund Site, April 9, 2008.



Source Location

A - Plant Facility Area

B - Tronox Property Line

C - Projected Property Line (3500 ft downgradient from source)

D - Nearest Downgradient Receptor (5000 ft downgradient from source)

E - Approx. PRG Boundary May 2007

F - Approx. Historic Plume Boundary

0 2000 4000

Scale (feet)

- Monitor well used in MAROS Evaluation

- Reference Point

Lori Robison
and Associates, L.L.C.

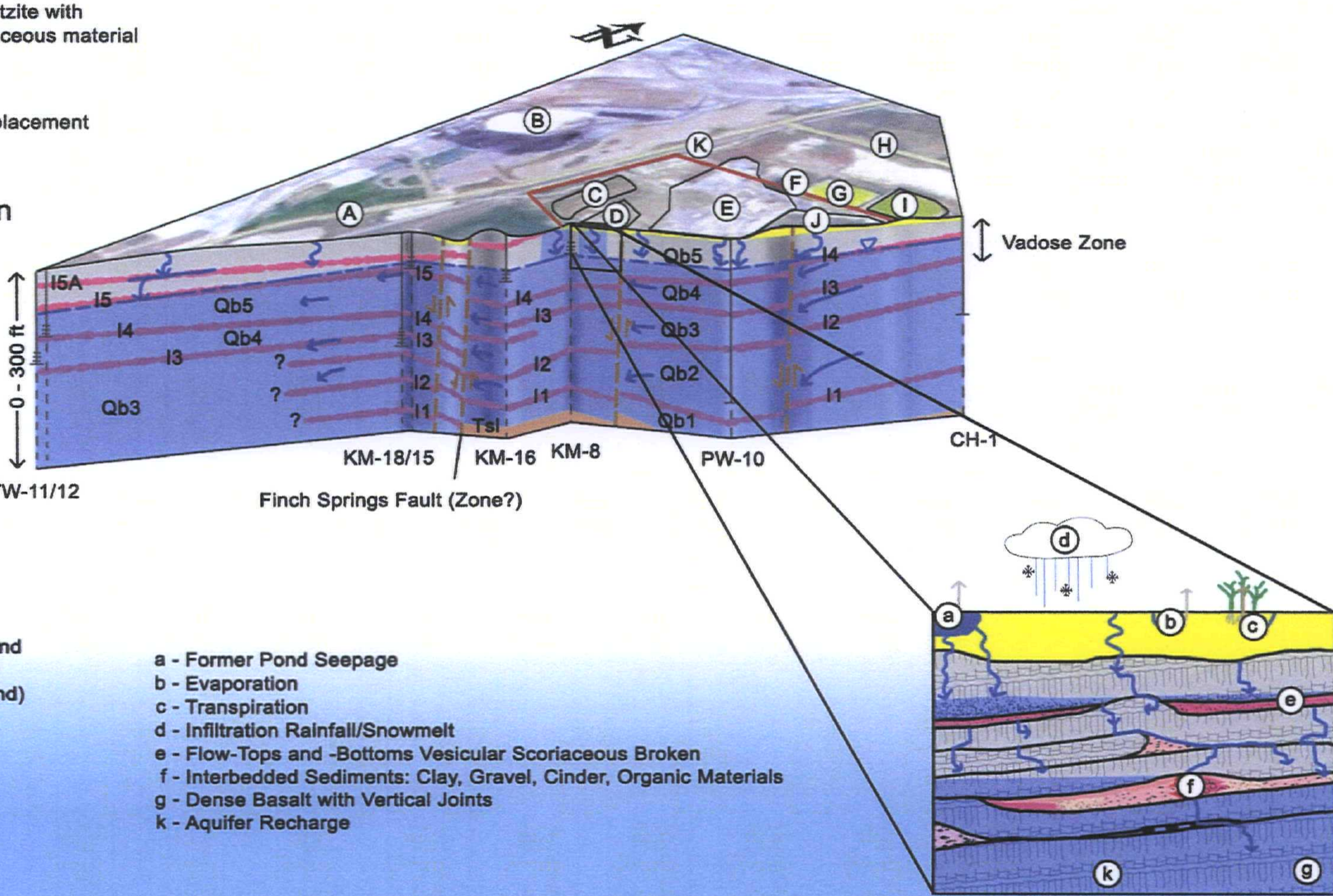
Figure 1
Area Map showing Simplified Plume Dimensions
Tronox Facility
Soda Springs, Idaho

2008-12-18

Figure 2
Hydrogeologic Setting Conceptual Model Tronox Facility Soda Springs, Idaho

Lori Robison and Associates, L.L.C.

- Qal - Alluvium
- Qb - Basalt Flow Sequences
- Qi - Basalt Interflow Sequences
- Tsl - Salt Lake Formation
  Conglomerate, sandstone, quartzite with interbedded limestone and tuffaceous material
- Fault Location
  Arrows indicate direction of displacement
- Water Level Elevation
- Water Flow Path



A - Highway 34
B - Monsanto
C - Former S-X Pond
D - Former Settling Ponds
E - Plant
F - Present Landfill Area
G - Reclaimed West 5-acre Pond
H - Reclaimed Calcine Tailings Pond
I - Reclaimed East 5-acre Pond
J - (North of Former Scrubber Pond)
K - Plant Site Boundary

a - Former Pond Seepage
b - Evaporation
c - Transpiration
d - Infiltration Rainfall/Snowmelt
e - Flow-Tops and -Bottoms Vesicular Scoriaceous Broken
f - Interbedded Sediments: Clay, Gravel, Cinder, Organic Materials
g - Dense Basalt with Vertical Joints
k - Aquifer Recharge

Figure not to scale
Basemap: Google Earth 2007

Note: Corehole/well depths are shown with approximate screen intervals where known

2008-12-18

Figure 3
COC Transport Proceses
Conceptual Model
Tronox Facility
Soda Springs, Idaho

Lori Robison and Associates, L.L.C.

Qal - Alluvium

Qb - Basalt Flow Sequences

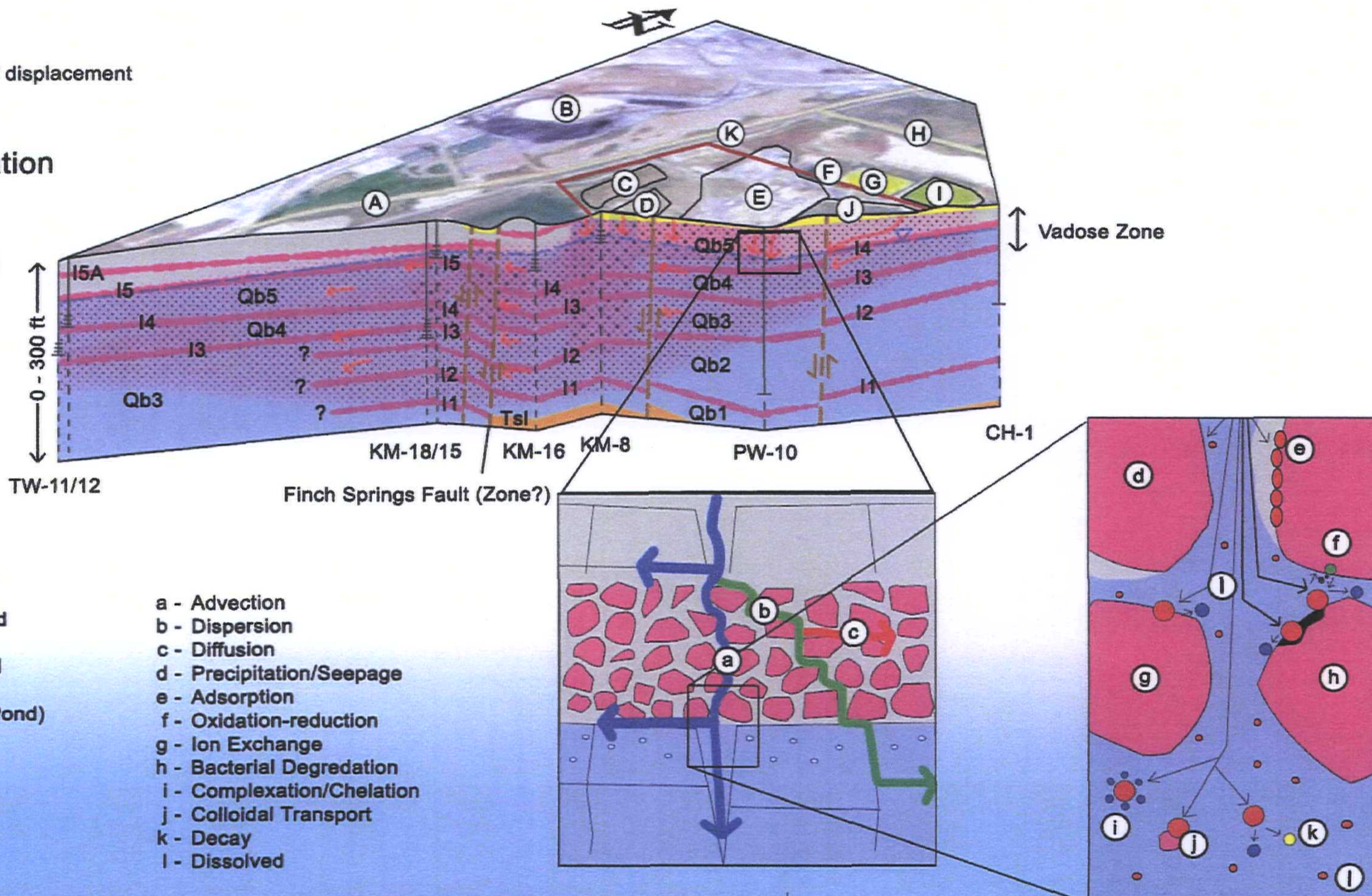
Qi - Basalt Interflow Sequences

Tsl - Salt Lake Formation
Conglomerate, sandstone, quartzite with interbedded limestone and tuffaceous material

Fault Location
Arrows indicate direction of displacement

Water Level Elevation

Contaminant Path



A - Highway 34
B - Monsanto
C - Former S-X Pond
D - Former Settling Ponds
E - Plant
F - Present Landfill Area
G - Reclaimed West 5-acre Pond
H - Trail Canyon Road
I - Reclaimed East 5-acre Pond
J - Capped Calcine Tailings (North of Former Scrubber Pond)
K - Plant Site Boundary

a - Advection
b - Dispersion
c - Diffusion
d - Precipitation/Seepage
e - Adsorption
f - Oxidation-reduction
g - Ion Exchange
h - Bacterial Degredation
i - Complexation/Chelation
j - Colloidal Transport
k - Decay
l - Dissolved

Figure not to scale
Basemap: Google Earth 2007

Note: Corehole/well depths are shown with approximate screen intervals where known

Lori Robison and Associates, L.L.C.
3415 South Eastwood Drive
Salt Lake City, UT 84109

Cell Phone: (801)243-3213 Fax (home office): (801)953-1900 Email: info@lorirobison.net

February 20, 2009

J. S. Brown
Global Environmental Technology
3630 East Cascade Way
Salt Lake City, UT 84109

RE: Seasonal Kendall Test - Letter Report
For the Kerr-McGee Chemical Corporation Superfund Site, Tronox Facility
Soda Springs, Idaho

Dear JB:

A Seasonal Kendall (SK) test for trends was performed using the U.S. Geological Survey's *Computer Program for the Kendall Family of Trend Tests* (Helsel and others, 2005)[1]. Vanadium concentrations from 12 wells, collected at the Tronox Facility between Fall 1997 and Spring 2008, were used to test for seasonal correlations.

Fluctuations in concentrations based on time of year when samples are collected have been observed and reported at the Tronox Facility. Seasonal variation is important to recognize and compensate for in order to better discern trends in concentration over time. The Seasonal Kendall program by the USGS performs the Mann-Kendall (MK) trend test for individual seasons of the year, where season is defined by the user. It then combines the individual results (from each season) into one overall test for whether the dependent (Y) variable (concentration) changes in a consistent direction over time.

Limitations

Seasonal patterns in ground water concentrations can be the result of various underlying causes. Recharge to the underlying aquifer could be derived mostly from ground water in one season; while during another season recharge may receive a large contribution from infiltration. Infiltration can vary in precipitation volume, be affected by temperature (which in turn affects precipitation type such as rain versus snow), and be influenced by the rate of evapotranspiration. Additional causes of seasonal patterns in concentrations include bio-chemical conditions in soil and ground water, which react with changes in groundwater levels. Natural and managed activities such as plant closures, changes in water usage and disposal, agricultural watering, and fertilization can all have an effect on concentration patterns.

[1] Helsel, D.R., Mueller, D.K., and Slack, J.R., 2005. Computer Program for the Kendall Family of Trend Tests, USGS Scientific Investigations Repoirt 2005-5275

The Seasonal Kendall Test does not identify the cause of or contributions to seasonality. It does however provide a means of evaluating the influence of seasonality on the distribution of the data and provides a quantitative way of evaluating trends. Helsel and Hirsch (2002)[2] recommend that whenever a correlation is statistically evaluated the data should be plotted on a scatter-plot, and remind us that no single numerical measure can substitute for the visual insight gained from a plot.

Seasonal Kendall Test Method

Data were prepared for analysis by creating separate input files for each well and sorting the data in the order of increasing time. Sample dates were converted to decimal years; for example November 21, 1997 was converted to 1997.974. Each sample event was assigned a season. Because only two events are performed per year at approximately the same time, sample events were assigned a number 1 for Spring and number 2 for Fall. The input file for each well contained the decimal year, assigned numerical value for the season, and corresponding concentration. Twelve wells were analyzed with an average of 22 sampling events between Fall 1997 and Spring 2008.

The basis for the Mann-Kendall test is to evaluate the null hypothesis H_o, by comparing it to the alternate hypothesis H_1:

H_o: a) no correlation exists between x and y, or
b) x and y are independent, or
c) the distribution of y does not depend on x, or
d) the probability ($y_i < y_j$ for $i<j$) = ½

versus

H_1: a) x and y are correlated, or
b) x and y are dependent, or
c) the distribution of y (percentiles, etc.) depends on x, or
d) the probability ($y_i < y_j$ for $i<j$) $\neq$½

The program output file from the Seasonal Kendall test provides the Kendall statistic S_k, the correlation coefficient Tau, the standard normal deviate Z_{Sk}, the p-value for significance of the trend, and a second p-value, which is adjusted to correct for covariance among seasons. The program output also includes the slope and intercept of the Kendall's line describing the overall trend. The definitions of these parameters are summarized from Helsel and Hirsch (2002):

Kendall's S statistic measures the monotonic dependence of y on x. (A monotonic correlation is when y increases or decreases –concentrations go up or down--as x increases—as time progresses). Data pairs are first ordered by increasing x. Kendall's S is calculated by subtracting the number of discordant pairs (M), the number of (x,y) pairs where y decreases as x increases, from the number of concordant pairs (P), where y increases with increasing x. If a positive correlation exists, the y's will increase more often than decrease as x increases. For a negative correlation, the y's will decrease more often than increase. If no correlation exists, the y's will

[2] Helsel, D.R., and Hirsch, R.M., 2002. Chapter A3, Statistical Methods in Water Resources, USGS publication available at http://water.usgs.gov/pubs/twri/twri4a3/

increase and decrease about the same number of times. There are n(n-1)/2 possible comparisons to be made among the n data pairs. The seasonal Kendall test accounts for seasonality by computing the Mann-Kendall test on each season separately, and then combining the results to derive the overall statistic S_k.

Kendall's Tau is a correlation coefficient used to measure the strength of association between two continuous variables. Tau (τ) is simply the S statistic divided by the number of comparisons in the n data pairs: $\tau = (S/(n(n-1)/2)$. If all y values increase along with the x values, tau will equal +1. If all y values decrease with increasing x, tau will equal -1. Tau will generally be lower than values of the traditional correlation coefficient r, for linear associations of the same strength. Strong linear correlations of 0.9 or above correspond to tau values of about 0.7 or above.

The Z_{Sk} statistic is also used to measure the strength of association between variables and is applied to large data sets, when the product of the number of seasons and number of years is more than about 25. The distribution is approximated by a normal distribution. The seasonal Kendall test computes the Mann-Kendall test for each season separately then combines the results to derive S_k. Similarly, variance (σ_{Sk}) is calculated as the sum of the variances from each test. The Z_{Sk} statistic is calculated from S_k and a σ_{Sk} as follows:

$Z_{Sk} = (S_k - 1)/\sigma_{Sk}$ if $S_k > 0$
$Z_{Sk} = 0$ if $S_k = 0$
$Z_{Sk} = (S_k + 1)/\sigma_{Sk}$ if $S_k < 0$

The Z_{Sk} values are used to calculate p-values.

The p-value is the significance level attained by the data. It measures the credibility of the null hypothesis, where the smaller the p-value, the stronger the evidence for rejection of the null hypothesis. The p-value can be compared to the alpha (α) level used in statistical evaluations. The difference between the p-value and the α level is that the p-value is calculated from the data whereas the α level is an assigned level. The p-value is found in a look-up table for a given sample size (n) and the calculated S statistic. For large sample approximations the calculated value of the Z statistic is used in a look-up table of normal distribution for a one-sided quantile. The p-value is calculated as: $p \approx 2*(1\text{-lookup value})$. The adjusted p-value is valid for data with more than 10 annual values per season.

An estimate of the slope for y over time is computed as the median of all slopes between data pairs within the same season.

Results of the Evaluation

Table 1 lists results from the Seasonal Kendall analysis for vanadium in 12 wells and includes S_k, tau, Z_{Sk}, and the p-value and adjusted p-value as percentages. Also listed is a qualitative assignment of seasonal trend from strong negative (tau > ±0.7 and p adjusted << 1%), to a moderate negative (tau > ±0.5 and p adjusted <2%), to no trend (tau < ±0.5 and p adjusted ≥ 5%).

Table 1. Seasonal Kendall Test Results

Wells	S_k	tau	Z_{Sk}	p	p adjusted	Seasonal Trend
KM-2	-80	-0.727	-4.349	0.00%	0.19%	strong trend
KM-3	-33	-0.3	-1.77	7.68%	4.76%	no trend
KM-4	-31	-0.282	-1.654	9.81%	9.81%	no trend
KM-5	-87	-0.791	-4.871	0.00%	0.03%	strong trend
KM-6	-60	-0.545	-3.248	0.12%	1.55%	moderate trend
KM-7	-32	-0.5	-2.548	1.08%	1.27%	moderate trend
KM-8	26	0.236	1.376	16.88%	26.86%	no trend
KM-9	-102	-0.927	-5.577	0.00%	0.01%	strong trend
KM-13	-96	-0.873	-5.23	0.00%	0.01%	strong trend
KM-15	-97	-0.882	-5.314	0.00%	0.01%	strong trend
KM-16	-77	-0.7	-4.203	0.00%	0.22%	strong trend
KM-17	-14	-0.14	-0.763	44.52%	54.73%	no trend

Tan highlighted area indicates significant probability of no seasonal trend

In statistical analyses, often an alpha level is assigned as a risk tolerance level in evaluating trends and in using the results of the statistical evaluation in decision making. Typical alpha levels are between 1 and 5 percent. The qualitative assignment in Table 1 above used similar ranges to highlight wells that are most likely influenced by seasonal trends and those that may be influenced by sources other than (or in addition to) seasonality.

If you have any questions regarding the evaluation or any other aspects of the report, please call.

Sincerely,
Lori Robison and Associates, L.L.C.

Lori C. Robison

Lori C. Robison, P.G.
Senior Hydrogeologist

Attachments:
Computer Printouts for 12 wells

```
     Seasonal Kendall Test for Trend
       US Geological Survey, 2005

Data set:  KM-2 Vanadium


The record is 11 complete water years with   2 seasons per year
   beginning in water year 1998.

The tau correlation coefficient is -0.727
    S =     -80.
    z =   -4.349
    p =   0.0000
    p =   0.0019 adjusted for correlation among seasons
                 (such as serial dependence)
The adjusted p-value should be used only for data with
   more than 10 annual values per season.

The estimated trend may be described by the equation:

   Y =   9734.     +    -624.3     * Time

   where Time = Year (as a decimal) - 1997.75 (beginning of first water year)
```

Seasonal Kendall Test for Trend
US Geological Survey, 2005

Data set: KM-3 Vanadium

The record is 11 complete water years with 2 seasons per year
beginning in water year 1998.

The tau correlation coefficient is -0.300
S = -33.
z = -1.770
p = 0.0768
p = 0.0476 adjusted for correlation among seasons
(such as serial dependence)
The adjusted p-value should be used only for data with
more than 10 annual values per season.

The estimated trend may be described by the equation:

Y = 3284. + -89.76 * Time

where Time = Year (as a decimal) - 1997.75 (beginning of first water year)

Seasonal Kendall Test for Trend
US Geological Survey, 2005

Data set: KM-4 Vanadium

The record is 11 complete water years with 2 seasons per year
beginning in water year 1998.

The tau correlation coefficient is -0.282
S = -31.
z = -1.654
p = 0.0981
p = 0.2064 adjusted for correlation among seasons
(such as serial dependence)
The adjusted p-value should be used only for data with
more than 10 annual values per season.

The estimated trend may be described by the equation:

Y = 8896. + -508.3 * Time

where Time = Year (as a decimal) - 1997.75 (beginning of first water year)

```
    Seasonal Kendall Test for Trend
      US Geological Survey, 2005

Data set:  KM-5 Vanadium

The record is 11 complete water years with   2 seasons per year
   beginning in water year 1998.

The tau correlation coefficient is -0.791
    S =    -87.
    z =  -4.871
    p =  0.0000
    p =  0.0003 adjusted for correlation among seasons
                 (such as serial dependence)
The adjusted p-value should be used only for data with
   more than 10 annual values per season.

The estimated trend may be described by the equation:

   Y =  2047.     +   -119.4     * Time

   where Time = Year (as a decimal) - 1997.75 (beginning of first water year)
```

Seasonal Kendall Test for Trend
US Geological Survey, 2005

Data set: KM-6 Vanadium

The record is 11 complete water years with 2 seasons per year
beginning in water year 1998.

The tau correlation coefficient is -0.545
S = -60.
z = -3.248
p = 0.0012
p = 0.0155 adjusted for correlation among seasons
(such as serial dependence)
The adjusted p-value should be used only for data with
more than 10 annual values per season.

The estimated trend may be described by the equation:

Y = 5529. + -210.7 * Time

where Time = Year (as a decimal) - 1997.75 (beginning of first water year)

Seasonal Kendall Test for Trend
US Geological Survey, 2005

Data set: KM-7 Vanadium

The record is 9 complete water years with 2 seasons per year
beginning in water year 2000.

The tau correlation coefficient is -0.500
S = -32.
z = -2.548
p = 0.0108
p = 0.0127 adjusted for correlation among seasons
(such as serial dependence)
The adjusted p-value should be used only for data with
more than 10 annual values per season.

The estimated trend may be described by the equation:

Y = 2480. + -40.00 * Time

where Time = Year (as a decimal) - 1999.75 (beginning of first water year)

```
Seasonal Kendall Test for Trend
  US Geological Survey, 2005

Data set:  KM-8 Vanadium

The record is 11 complete water years with   2 seasons per year
   beginning in water year 1998.

The tau correlation coefficient is  0.236
    S =      26.
    z =    1.376
    p =   0.1688
    p =   0.2686 adjusted for correlation among seasons
                (such as serial dependence)
The adjusted p-value should be used only for data with
   more than 10 annual values per season.

The estimated trend may be described by the equation:

   Y =  0.1310E+05 +     981.7      * Time

   where Time = Year (as a decimal) - 1997.75 (beginning of first water year)
```

```
     Seasonal Kendall Test for Trend
       US Geological Survey, 2005

Data set:  KM-9 Vanadium


The record is 11 complete water years with   2 seasons per year
   beginning in water year 1998.

The tau correlation coefficient is -0.927
    S =   -102.
    z =  -5.577
    p =  0.0000
    p =  0.0001 adjusted for correlation among seasons
                (such as serial dependence)
The adjusted p-value should be used only for data with
   more than 10 annual values per season.

The estimated trend may be described by the equation:

   Y =   847.0     +    -48.55     * Time

   where Time = Year (as a decimal) - 1997.75 (beginning of first water year)
```

```
    Seasonal Kendall Test for Trend
      US Geological Survey, 2005

Data set:  KM-13 Vanadium

The record is 11 complete water years with   2 seasons per year
   beginning in water year 1998.

The tau correlation coefficient is -0.873
    S =     -96.
    z =   -5.230
    p =   0.0000
    p =   0.0001 adjusted for correlation among seasons
                 (such as serial dependence)
The adjusted p-value should be used only for data with
   more than 10 annual values per season.

The estimated trend may be described by the equation:

   Y =    781.7      +    -36.95      * Time

   where Time = Year (as a decimal) - 1997.75 (beginning of first water year)
```

```
        Seasonal Kendall Test for Trend
          US Geological Survey, 2005

Data set:  KM-2 Vanadium

The record is 11 complete water years with   2 seasons per year
   beginning in water year 1998.

The tau correlation coefficient is -0.882
    S =    -97.
    z =  -5.314
    p =  0.0000
    p =  0.0001 adjusted for correlation among seasons
                (such as serial dependence)
The adjusted p-value should be used only for data with
   more than 10 annual values per season.

The estimated trend may be described by the equation:

   Y =   1414.     +   -66.19     * Time

   where Time = Year (as a decimal) - 1997.75 (beginning of first water year)
```

Seasonal Kendall Test for Trend
US Geological Survey, 2005

Data set: KM-16 Vanadium

The record is 11 complete water years with 2 seasons per year
beginning in water year 1998.

The tau correlation coefficient is -0.700
S = -77.
z = -4.203
p = 0.0000
p = 0.0022 adjusted for correlation among seasons
(such as serial dependence)
The adjusted p-value should be used only for data with
more than 10 annual values per season.

The estimated trend may be described by the equation:

Y = 3797. + -181.2 * Time

where Time = Year (as a decimal) - 1997.75 (beginning of first water year)

Seasonal Kendall Test for Trend
US Geological Survey, 2005

Data set: KM-17 Vanadium

The record is 11 complete water years with 2 seasons per year
beginning in water year 1998.

The tau correlation coefficient is -0.140
S = -14.
z = -0.763
p = 0.4452
p = 0.5473 adjusted for correlation among seasons
(such as serial dependence)
The adjusted p-value should be used only for data with
more than 10 annual values per season.

The estimated trend may be described by the equation:

Y = 11.50 + -0.6000 * Time

where Time = Year (as a decimal) - 1997.75 (beginning of first water year)

APPENDIX A

MAROS Reports 1997 – 2008

APPENDIX A
TABLE OF CONTENTS

MAROS COC Assessment

Project: Tronox V MO 13 wells Finch All **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Toxicity:

Contaminant of Concern	Representative Concentration (mg/L)	PRG (mg/L)	Percent Above PRG
MOLYBDENUM	6.2E+00	1.8E-01	3347.7%
VANADIUM	3.6E+00	2.6E-01	1301.9%

Note: Top COCs by toxicity were determined by examining a representative concentration for each compound over the entire site. The compound representative concentrations are then compared with the chosen PRG for that compound, with the percentage excedence from the PRG determining the compound's toxicity. All compounds above exceed the PRG.

Prevalence:

Contaminant of Concern	Class	Total Wells	Total Excedences	Percent Excedences	Total detects
MOLYBDENUM	MET	14	13	92.9%	14
VANADIUM	MET	14	11	78.6%	14

Note: Top COCs by prevalence were determined by examining a representative concentration for each well location at the site. The total excedences (values above the chosen PRGs) are compared to the total number of wells to determine the prevalence of the compound.

Mobility:

Contaminant of Concern	Kd
MOLYBDENUM	20
VANADIUM	1000

Note: Top COCs by mobility were determined by examining each detected compound in the dataset and comparing their mobilities (Koc's for organics, assume foc = 0.001, and Kd's for metals).

Contaminants of Concern (COC's)

MOLYBDENUM

VANADIUM

MAROS Mann-Kendall Statistics Summary

Project: Tronox V MO 13 wells Finch All

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Time Period: 10/1/1997 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : *Actual Value*

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
MOLYBDENUM								
KM-3	S	22	22	0.55	-121	100.0%	No	D
KM-9	S	22	22	0.27	-149	100.0%	No	D
KM-13	S	22	22	0.68	-203	100.0%	No	D
KM-8	S	22	22	0.42	-167	100.0%	No	D
KM-7	S	17	17	0.15	-64	99.6%	No	D
KM-6	S	22	22	0.31	-110	99.9%	No	D
KM-5	S	22	22	0.36	-130	100.0%	No	D
KM-17	S	22	22	0.22	-85	99.2%	No	D
KM-4	S	22	22	0.82	-183	100.0%	No	D
KM-2	S	22	22	0.95	-174	100.0%	No	D
KM-15	T	22	22	0.51	-196	100.0%	No	D
KM-16	T	22	22	0.39	-158	100.0%	No	D
Finch Spring	T	22	22	0.38	-207	100.0%	No	D
VANADIUM								
KM-13	S	22	22	0.22	-197	100.0%	No	D
KM-17	S	21	21	0.58	-22	73.5%	No	S
KM-3	S	22	22	0.33	-46	89.6%	No	S
KM-9	S	22	22	0.28	-204	100.0%	No	D
KM-4	S	22	22	0.53	-68	97.1%	No	D
KM-5	S	22	22	0.29	-166	100.0%	No	D
KM-6	S	22	22	0.21	-100	99.8%	No	D
KM-7	S	17	17	0.13	-68	99.8%	No	D
KM-8	S	22	22	0.37	51	92.0%	No	PI
KM-2	S	22	22	0.33	-155	100.0%	No	D
KM-16	T	22	22	0.21	-155	100.0%	No	D
KM-15	T	22	22	0.21	-184	100.0%	No	D
Finch Spring	T	22	22	0.22	57	94.2%	No	PI

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Linear Regression Statistics Summary

Project: Tronox V MO 13 wells Finch All

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Time Period: 10/1/1997 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value

Well	Source/ Tail	Average Conc (mg/L)	Median Conc (mg/L)	Standard Deviation	All Samples "ND" ?	Ln Slope	Coefficient of Variation	Confidence in Trend	Concentration Trend
MOLYBDENUM									
KM-9	S	2.1E-01	1.9E-01	5.6E-02	No	-1.5E-04	0.27	100.0%	D
KM-5	S	2.4E-01	2.0E-01	8.6E-02	No	-1.9E-04	0.36	100.0%	D
KM-13	S	5.2E-01	4.2E-01	3.6E-01	No	-4.4E-04	0.68	100.0%	D
KM-3	S	9.0E+00	7.2E+00	4.9E+00	No	-2.1E-04	0.55	100.0%	D
KM-7	S	4.5E-01	4.4E-01	6.5E-02	No	-1.0E-04	0.15	99.7%	D
KM-4	S	5.2E+00	3.3E+00	4.3E+00	No	-4.9E-04	0.82	100.0%	D
KM-2	S	2.3E+00	1.9E+00	2.2E+00	No	-3.6E-04	0.95	100.0%	D
KM-6	S	1.6E+00	1.4E+00	5.0E-01	No	-1.6E-04	0.31	100.0%	D
KM-17	S	5.4E-01	5.3E-01	1.2E-01	No	-1.0E-04	0.22	99.5%	D
KM-8	S	5.6E+01	5.2E+01	2.3E+01	No	-3.0E-04	0.42	100.0%	D
Finch Spring	T	3.2E-01	2.9E-01	1.2E-01	No	-2.9E-04	0.38	100.0%	D
KM-15	T	6.8E-01	5.5E-01	3.4E-01	No	-3.0E-04	0.51	100.0%	D
KM-16	T	1.1E+00	9.4E-01	4.4E-01	No	-2.5E-04	0.39	100.0%	D
VANADIUM									
KM-17	S	1.0E-02	8.2E-03	6.0E-03	No	-1.2E-04	0.58	83.5%	S
KM-2	S	6.6E+00	6.3E+00	2.2E+00	No	-2.4E-04	0.33	100.0%	D
KM-3	S	3.0E+00	2.8E+00	9.9E-01	No	-6.1E-05	0.33	85.8%	S
KM-13	S	6.3E-01	5.8E-01	1.4E-01	No	-1.6E-04	0.22	100.0%	D
KM-4	S	7.5E+00	6.1E+00	4.0E+00	No	-2.1E-04	0.53	99.7%	D
KM-6	S	4.7E+00	4.4E+00	9.6E-01	No	-9.2E-05	0.21	99.5%	D
KM-7	S	2.4E+00	2.3E+00	3.1E-01	No	-7.3E-05	0.13	99.3%	D
KM-8	S	1.9E+01	1.9E+01	7.0E+00	No	1.9E-04	0.37	99.4%	I
KM-9	S	6.0E-01	5.8E-01	1.7E-01	No	-2.2E-04	0.28	100.0%	D
KM-5	S	1.6E+00	1.4E+00	4.6E-01	No	-2.0E-04	0.29	100.0%	D
KM-16	T	2.9E+00	2.8E+00	6.1E-01	No	-1.5E-04	0.21	100.0%	D
Finch Spring	T	5.9E-02	6.1E-02	1.3E-02	No	9.6E-05	0.22	98.9%	I
KM-15	T	1.1E+00	1.1E+00	2.4E-01	No	-1.6E-04	0.21	100.0%	D

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); COV = Coefficient of Variation

MAROS Plume Analysis Summary

Project: Tronox V MO 13 wells Finch All

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Time Period: 10/1/1997 **to** 5/30/2008

Consolidation Period: No Time Consolidation

Consolidation Type: Geometric Mean

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Constituent	Well	Source/ Tail	Number of Samples	Number of Detects	Average (mg/L)	Median (mg/L)	All Samples "ND" ?	Mann-Kendall	Linear Regression	Modeling	Empirical
MOLYBDENUM											
	KM-3	S	22	22	9.0E+00	7.2E+00	No	D	D	N/A	N/A
	KM-9	S	22	22	2.1E-01	1.9E-01	No	D	D	N/A	N/A
	KM-13	S	22	22	5.2E-01	4.2E-01	No	D	D	N/A	N/A
	KM-8	S	22	22	5.6E+01	5.2E+01	No	D	D	N/A	N/A
	KM-7	S	17	17	4.5E-01	4.4E-01	No	D	D	N/A	N/A
	KM-6	S	22	22	1.6E+00	1.4E+00	No	D	D	N/A	N/A
	KM-5	S	22	22	2.4E-01	2.0E-01	No	D	D	N/A	N/A
	KM-17	S	22	22	5.4E-01	5.3E-01	No	D	D	N/A	N/A
	KM-4	S	22	22	5.2E+00	3.3E+00	No	D	D	N/A	N/A
	KM-2	S	22	22	2.3E+00	1.9E+00	No	D	D	N/A	N/A
	KM-15	T	22	22	6.8E-01	5.5E-01	No	D	D	N/A	N/A
	KM-16	T	22	22	1.1E+00	9.4E-01	No	D	D	N/A	N/A
	Finch Spring	T	22	22	3.2E-01	2.9E-01	No	D	D	N/A	N/A
VANADIUM											
	KM-13	S	22	22	6.3E-01	5.8E-01	No	D	D	N/A	N/A
	KM-17	S	21	21	1.0E-02	8.2E-03	No	S	S	N/A	N/A
	KM-3	S	22	22	3.0E+00	2.8E+00	No	S	S	N/A	N/A
	KM-9	S	22	22	6.0E-01	5.8E-01	No	D	D	N/A	N/A
	KM-4	S	22	22	7.5E+00	6.1E+00	No	D	D	N/A	N/A
	KM-5	S	22	22	1.6E+00	1.4E+00	No	D	D	N/A	N/A
	KM-6	S	22	22	4.7E+00	4.4E+00	No	D	D	N/A	N/A

Project: Tronox V MO 13 wells Finch All **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Constituent	Well	Source/ Tail	Number of Samples	Number of Detects	Average (mg/L)	Median (mg/L)	All Samples "ND" ?	Mann-Kendall	Linear Regression	Modeling	Empirical
VANADIUM											
	KM-7	S	17	17	2.4E+00	2.3E+00	No	D	D	N/A	N/A
	KM-8	S	22	22	1.9E+01	1.9E+01	No	PI	I	N/A	N/A
	KM-2	S	22	22	6.6E+00	6.3E+00	No	D	D	N/A	N/A
	KM-16	T	22	22	2.9E+00	2.8E+00	No	D	D	N/A	N/A
	KM-15	T	22	22	1.1E+00	1.1E+00	No	D	D	N/A	N/A
	Finch Spring	T	22	22	5.9E-02	6.1E-02	No	PI	I	N/A	N/A

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

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MAROS Spatial Moment Analysis Summary

Project: Tronox V MO 13 wells Finch All

User Name: Global Environmental

Location: Soda Springs

State: Idaho

	0th Moment	1st Moment (Center of Mass)			2nd Moment (Spread)		
Effective Date	Estimated Mass (Kg)	Xc (ft)	Yc (ft)	Source Distance (ft)	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
MOLYBDENUM							
11/20/1997	1.7E+04	658,948	371,066	1,361	416,438	934,664	12
5/5/1998	1.4E+04	658,808	371,094	1,420	354,991	927,772	12
10/27/1998	1.3E+04	658,883	371,060	1,402	376,429	933,047	12
5/4/1999	1.2E+04	658,825	371,067	1,431	344,161	911,643	12
10/5/1999	1.1E+04	658,838	371,022	1,460	352,137	931,176	12
5/8/2000	1.1E+04	658,803	370,961	1,530	331,737	923,939	13
9/25/2000	9.2E+03	658,821	370,934	1,541	345,045	943,129	13
4/27/2001	9.5E+03	658,786	370,932	1,563	334,295	927,448	13
10/26/2001	9.1E+03	658,818	370,876	1,591	340,709	966,418	13
5/31/2002	8.7E+03	658,821	370,930	1,544	344,124	930,287	13
10/18/2002	8.3E+03	658,835	370,941	1,527	348,997	948,373	13
5/31/2003	7.9E+03	658,844	370,921	1,539	350,135	946,276	13
10/23/2003	7.3E+03	658,836	370,922	1,543	347,173	960,632	13
5/3/2004	7.5E+03	658,849	370,970	1,495	353,448	944,021	13
10/13/2004	6.5E+03	658,830	370,938	1,533	345,286	963,167	13
5/3/2005	7.0E+03	658,802	370,989	1,508	345,273	918,992	13
10/25/2005	6.5E+03	658,833	370,969	1,506	344,793	934,475	13
5/15/2006	7.0E+03	658,767	370,979	1,537	328,271	911,206	13
10/23/2006	6.1E+03	658,812	370,995	1,497	345,488	913,682	13
5/14/2007	5.8E+03	658,792	371,000	1,505	342,660	907,972	13
10/15/2007	5.9E+03	658,830	371,003	1,479	346,430	914,812	13
5/5/2008	5.8E+03	658,795	371,013	1,493	341,124	911,775	13
VANADIUM							
11/20/1997	1.1E+04	658,898	371,723	933	364,272	404,774	12
5/5/1998	1.6E+04	658,846	371,323	1,224	290,642	839,895	11
10/27/1998	9.6E+03	658,872	371,692	972	365,519	446,526	12
5/4/1999	9.7E+03	658,874	371,731	950	355,209	410,341	12
10/5/1999	9.2E+03	658,843	371,650	1,018	362,561	485,361	12
5/8/2000	1.0E+04	658,773	371,624	1,091	343,130	473,459	13
9/25/2000	7.6E+03	658,750	371,647	1,099	353,572	432,128	13
4/27/2001	8.1E+03	658,731	371,647	1,116	347,942	421,823	13
10/26/2001	7.9E+03	658,730	371,627	1,126	346,191	452,600	13
5/31/2002	7.7E+03	658,735	371,679	1,096	361,773	371,379	13
10/18/2002	7.7E+03	658,729	371,691	1,096	349,778	368,600	13
5/31/2003	7.2E+03	658,743	371,694	1,082	354,198	370,304	13
10/23/2003	6.8E+03	658,704	371,660	1,133	338,911	404,914	13
5/3/2004	7.8E+03	658,759	371,624	1,103	348,179	466,673	13
10/13/2004	6.6E+03	658,693	371,633	1,155	323,330	439,755	13

Project: Tronox V MO 13 wells Finch All

Location: Soda Springs

User Name: Global Environmental

State: Idaho

	0th Moment	1st Moment (Center of Mass)			2nd Moment (Spread)		
Effective Date	Estimated Mass (kg)	Xc (ft)	Yc (ft)	Source Distance (ft)	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
VANADIUM							
5/3/2005	6.4E+03	658,755	371,683	1,078	351,051	398,310	13
10/25/2005	6.6E+03	658,717	371,644	1,130	324,212	421,811	13
5/15/2006	8.0E+03	658,783	371,739	1,026	314,225	345,668	13
10/23/2006	7.2E+03	658,745	371,639	1,108	319,837	433,967	13
5/14/2007	7.5E+03	658,778	371,613	1,093	330,251	485,674	13
10/15/2007	7.1E+03	658,754	371,644	1,097	331,495	442,587	13
5/5/2008	7.1E+03	658,802	371,621	1,068	343,745	486,609	13

Project: Tronox V MO 13 wells Finch All

Location: Soda Springs

User Name: Global Environmental

State: Idaho

Moment Type	Constituent	Coefficient of Variation	Mann-Kendall S Statistic	Confidence in Trend	Moment Trend
Zeroth Moment: Mass					
	MOLYBDENUM	0.33	-215	100.0%	D
	VANADIUM	0.26	-141	100.0%	D
1st Moment: Distance to Source					
	MOLYBDENUM	0.04	15	65.2%	NT
	VANADIUM	0.06	33	81.4%	NT
2nd Moment: Sigma XX					
	MOLYBDENUM	0.05	-59	94.9%	PD
	VANADIUM	0.05	-95	99.7%	D
2nd Moment: Sigma YY					
	MOLYBDENUM	0.02	-45	89.1%	S
	VANADIUM	0.22	-5	54.4%	S

Note: The following assumptions were applied for the calculation of the Zeroth Moment:

Porosity: 0.20 **Saturated Thickness:** Uniform: 200 ft

Mann-Kendall Trend test performed on all sample events for each constituent. Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events).

Note: The Sigma XX and Sigma YY components are estimated using the given field coordinate system and then rotated to align with the estimated groundwater flow direction. Moments are not calculated for sample events with less than 6 wells.

MAROS Site Results

Project: Tronox 13 wells Finch yearly

User Name: Global Environmental

Location: Soda Springs

State: Idaho

User Defined Site and Data Assumptions:

Hydrogeology and Plume Information:

Groundwater Seepage Velocity: 5475 ft/yr

Current Plume Length: 6000 ft

Current Plume Width 3500 ft

Number of Tail Wells: 3

Number of Source Wells: 11

Source Information:

Source Treatment: No Current Site Treatment

NAPL is not observed at this site.

Down-gradient Information:

Distance from Edge of Tail to Nearest:

Down-gradient receptor: -700 ft

Down-gradient property: -2000 ft

Distance from Source to Nearest:

Down-gradient receptor: 5300 ft

Down-gradient property: 4000 ft

Data Consolidation Assumptions:

Time Period: 10/1/1997 **to** 5/30/2008

Consolidation Period: No Time Consolidation

Consolidation Type: Geometric Mean

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Plume Information Weighting Assumptions:

Consolidation Step 1. Weight Plume Information by Chemical

Summary Weighting: Weighting Applied to All Chemicals Equally

Consolidation Step 2. Weight Well Information by Chemical

Well Weighting: No Weighting of Wells was Applied.

Chemical Weighting: No Weighting of Chemicals was Applied.

Note: These assumptions were made when consolidating the historical montoring data and lumping the Wells and COCs.

1. Compliance Monitoring/Remediation Optimization Results:

Preliminary Monitoring System Optimization Results: Based on site classification, source treatment and Monitoring System Category the following suggestions are made for site Sampling Frequency, Duration of Sampling before reassessment, and Well Density. These criteria take into consideration: Plume Stability, Type of Plume, and Groundwater Velocity.

COC	Tail Stability	Source Stability	Level of Effort	Sampling Duration	Sampling Frequency	Sampling Density
MOLYBDENUM	D	D	L	End Sampling	Close site	> 50
VANADIUM	PD	PD	L	Sample 1 more year	Biannually (6 months)	> 50

Note:

Plume Status: (I) Increasing; (PI)Probably Increasing; (S) Stable; (NT) No Trend; (PD) Probably Decreasing; (D) Decreasing

Design Categories: (E) Extensive; (M) Moderate; (L) Limited (N/A) Not Applicable, Insufficient Data Available

Level of Monitoring Effort Indicated by Analysi Limited

2. Spatial Moment Analysis Results:

Moment Type	Constituent	Coefficient of Variation	Mann-Kendall S Statistic	Confidence in Trend	Moment Trend
Zeroth Moment: Mass					
	MOLYBDENUM	0.33	-215	100.0%	D
	VANADIUM	0.26	-141	100.0%	D
1st Moment: Distance to Source					
	MOLYBDENUM	0.04	15	65.2%	NT
	VANADIUM	0.06	33	81.4%	NT
2nd Moment: Sigma XX					
	MOLYBDENUM	0.05	-59	94.9%	PD
	VANADIUM	0.05	-95	99.7%	D
2nd Moment: Sigma YY					
	MOLYBDENUM	0.02	-45	89.1%	S
	VANADIUM	0.22	-5	54.4%	S

Note: The following assumptions were applied for the calculation of the Zeroth Moment:

Porosity: 0.20 **Saturated Thickness:** Uniform: 200 ft

Mann-Kendall Trend test performed on all sample events for each constituent. Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events).

MAROS Sampling Location Optimization Results

Project: Tronox 13 Wells Finch All Datta **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Sampling Events Analyzed: From Fall 97 11/20/1997 to Spring 08 5/5/2008

Parameters used:

Constituent	Inside SF	Hull SF	Area Ratio	Conc. Ratio
MOLYBDENUM	0.1	0.01	0.95	0.95
VANADIUM	0.1	0.01	0.95	0.95

Well	X (feet)	Y (feet)	Removable?	Average Slope Factor*	Minimum Slope Factor*	Maximum Slope Factor*	Eliminated?
MOLYBDENUM							
Finch Spring	658191.88	367132.03	☑	0.521	0.219	0.637	☐
KM-13	658042.50	372185.75	☑	0.532	0.308	0.802	☐
KM-15	657491.88	370332.03	☑	0.110	0.044	0.208	☐
KM-16	658151.13	371058.75	☑	0.169	0.044	0.238	☐
KM-17	659365.31	371100.34	☑	0.463	0.360	0.646	☐
KM-2	660379.19	371777.03	☑	0.111	0.013	0.256	☐
KM-3	659825.56	371745.66	☑	0.307	0.200	0.414	☐
KM-4	659695.19	372033.81	☑	0.187	0.073	0.290	☐
KM-5	658856.63	372710.72	☑	0.644	0.384	0.736	☐
KM-6	658601.63	371736.94	☑	0.147	0.024	0.224	☐
KM-7	658578.44	372113.19	☑	0.469	0.357	0.586	☐
KM-8	658144.19	371771.97	☑	0.739	0.639	0.795	☐
KM-9	657836.25	371770.47	☑	0.853	0.762	0.922	☐
VANADIUM							
Finch Spring	658191.88	367132.03	☑	0.293	0.055	0.786	☐
KM-13	658042.50	372185.75	☑	0.241	0.162	0.316	☐
KM-15	657491.88	370332.03	☑	0.204	0.022	0.276	☐
KM-16	658151.13	371058.75	☑	0.116	0.078	0.165	☐
KM-17	659365.31	371100.34	☑	0.843	0.727	1.000	☐
KM-2	660379.19	371777.03	☑	0.210	0.102	0.285	☐
KM-3	659825.56	371745.66	☑	0.081	0.010	0.235	☑
KM-4	659695.19	372033.81	☑	0.190	0.116	0.274	☐
KM-5	658856.63	372710.72	☑	0.063	0.019	0.105	☐
KM-6	658601.63	371736.94	☑	0.094	0.032	0.169	☑
KM-7	658578.44	372113.19	☑	0.045	0.021	0.072	☑
KM-8	658144.19	371771.97	☑	0.295	0.170	0.388	☐

Project: Tronox 13 Wells Finch All Datta

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Well	X (feet)	Y (feet)	Removable?	Average Slope Factor*	Minimum Slope Factor*	Maximum Slope Factor*	Eliminated?
KM-9	657836.25	371770.47	☑	0.333	0.221	0.444	☐

Note: The Slope Factor indicates the relative importance of a well in the monitoring network at a given sampling event; the larger the SF value of a well, the more important the well is and vice versa; the Average Slope Factor measures the overall well importance in the selected time period; the state coordinates system (i.e., X and Y refer to Easting and Northing respectively) or local coordinates systems may be used; wells that are NOT selected for analysis are not shown above.

* When the report is generated after running the Excel module, SF values will NOT be shown above.

MAROS Sampling Location Optimization

Results by Considering All COCs

Project: Tronox 13 Wells Finch All Datta

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Sampling Events Analyzed: **From** Fall 97 11/20/1997 **to** Spring 08 5/5/2008

Well	X (feet)	Y (feet)	Number of COCs	COC-Averaged Slope Factor*	Abandoned?
Finch Spring	658191.88	367132.03	2	0.407	☐
KM-13	658042.50	372185.75	2	0.387	☐
KM-15	657491.88	370332.03	2	0.157	☐
KM-16	658151.13	371058.75	2	0.142	☐
KM-17	659365.31	371100.34	2	0.653	☐
KM-2	660379.19	371777.03	2	0.160	☐
KM-3	659825.56	371745.66	2	0.194	☐
KM-4	659695.19	372033.81	2	0.189	☐
KM-5	658856.63	372710.72	2	0.353	☐
KM-6	658601.63	371736.94	2	0.121	☐
KM-7	658578.44	372113.19	2	0.257	☐
KM-8	658144.19	371771.97	2	0.517	☐
KM-9	657836.25	371770.47	2	0.593	☐

Note: the COC-Averaged Slope Factor is the value calculated by averaging those "Average Slope Factor" obtained earlier across COCs; to be conservative, a location is "abandoned" only when it is eliminated from all COCs; "abandoned" doesn't necessarily mean the abandon of well, it can mean that NO samples need to be collected for any COCs.
* When the report is generated after running the Excel module, SF values will NOT be shown above.

MAROS Sampling Frequency Optimization Results

Project: Tronox 13 Wells Finch All Datta

User Name: Global Environmental

Location: Soda Springs

State: Idaho

The Overall Number of Sampling Events: 22

"Recent Period" defined by events: **From** Fall 97 11/20/1997 **To** Spring 08 5/5/2008

"Rate of Change" parameters used:

Constituent	Cleanup Goal	Low Rate	Medium Rate	High Rate
MOLYBDENUM	0.18	0.09	0.18	0.36
VANADIUM	0.26	0.13	0.26	0.52

Units: Cleanup Goal is in mg/L; all rate parameters are in mg/L/year.

Well	Recommended Sampling Frequency	Frequency Based on Recent Data	Frequency Based on Overall Data
MOLYBDENUM			
Finch Spring	Annual	Annual	Annual
KM-13	Annual	Annual	Annual
KM-15	Annual	Annual	Annual
KM-16	Annual	Annual	Annual
KM-17	Annual	Annual	Annual
KM-2	Annual	Annual	Annual
KM-3	Annual	Annual	Annual
KM-4	Annual	Annual	Annual
KM-5	Annual	Annual	Annual
KM-6	Annual	Annual	Annual
KM-7	Annual	Annual	Annual
KM-8	Annual	Annual	Annual
KM-9	Annual	Annual	Annual
VANADIUM			
Finch Spring	Biennial	Annual	Annual
KM-13	Annual	Annual	Annual
KM-15	Annual	Annual	Annual
KM-16	Annual	Annual	Annual
KM-17	Biennial	Annual	Annual
KM-2	Annual	Annual	Annual
KM-3	Annual	Annual	Annual
KM-4	Annual	Annual	Annual
KM-5	Annual	Annual	Annual

Project: Tronox 13 Wells Finch All Datta

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Well	Recommended Sampling Frequency	Frequency Based on Recent Data	Frequency Based on Overall Data
KM-6	Annual	Annual	Annual
KM-7	Annual	Annual	Annual
KM-8	Quarterly	Quarterly	Quarterly
KM-9	Annual	Annual	Annual

Note: Sampling frequency is determined considering both recent and overall concentration trends. Sampling Frequency is the final recommendation; Frequency Based on Recent Data is the frequency determined using recent (short) period of monitoring data; Frequency Based on Overall Data is the frequency determined using overall (long) period of monitoring data. If the "recent period" is defined using a different series of sampling events, the results could be different.

MAROS Power Analysis for Individual Well Cleanup Status

Project: Tronox 13 Wells Finch All Datta

User Name: Global Environmental

Location: Soda Springs

State: Idaho

From Period: 7/9/1997 **to** 5/5/2008

Well	Sample Size	Sample Mean	Sample Stdev.	Normal Distribution Assumption Cleanup Status	Lognormal Distribution Assumption Cleanup Status	Alpha Level	Expected Power
MOLYBDENUM				Cleanup Goal (mg/L) = 0.18	Target Level (mg/L) = 0.144		
Finch Spring	22	3.20E-01	1.20E-01	Not Attained	Not Attained	0.05	0.8
KM-13	22	5.22E-01	3.57E-01	Cont Sampling	Not Attained	0.05	0.8
KM-15	22	6.75E-01	3.42E-01	Not Attained	Not Attained	0.05	0.8
KM-16	22	1.13E+00	4.44E-01	Cont Sampling	Not Attained	0.05	0.8
KM-17	22	5.36E-01	1.16E-01	Not Attained	Not Attained	0.05	0.8
KM-2	22	2.33E+00	2.22E+00	Cont Sampling	Not Attained	0.05	0.8
KM-3	22	9.01E+00	4.92E+00	Cont Sampling	Not Attained	0.05	0.8
KM-4	22	5.22E+00	4.27E+00	Cont Sampling	Not Attained	0.05	0.8
KM-5	22	2.36E-01	8.60E-02	Not Attained	Not Attained	0.05	0.8
KM-6	22	1.64E+00	5.04E-01	Cont Sampling	Not Attained	0.05	0.8
KM-7	17	4.47E-01	6.48E-02	Not Attained	Not Attained	0.05	0.8
KM-8	22	5.57E+01	2.33E+01	Cont Sampling	Not Attained	0.05	0.8
KM-9	22	2.08E-01	5.59E-02	Not Attained	Not Attained	0.05	0.8
VANADIUM				Cleanup Goal (mg/L) = 0.26	Target Level (mg/L) = 0.208		
Finch Spring	22	5.92E-02	1.29E-02	Attained	Attained	0.05	0.8
KM-13	22	6.29E-01	1.38E-01	Not Attained	Not Attained	0.05	0.8
KM-15	22	1.10E+00	2.37E-01	Not Attained	Not Attained	0.05	0.8
KM-16	22	2.92E+00	6.11E-01	Not Attained	Not Attained	0.05	0.8
KM-17	21	1.04E-02	6.02E-03	Attained	Attained	0.05	0.8
KM-2	22	6.57E+00	2.15E+00	Cont Sampling	Not Attained	0.05	0.8
KM-3	22	2.96E+00	9.88E-01	Cont Sampling	Not Attained	0.05	0.8
KM-4	22	7.47E+00	3.96E+00	Cont Sampling	Not Attained	0.05	0.8
KM-5	22	1.56E+00	4.61E-01	Not Attained	Not Attained	0.05	0.8
KM-6	22	4.66E+00	9.63E-01	Cont Sampling	Not Attained	0.05	0.8
KM-7	17	2.39E+00	3.08E-01	Not Attained	Not Attained	0.05	0.8
KM-8	22	1.87E+01	6.99E+00	Cont Sampling	Not Attained	0.05	0.8
KM-9	22	6.02E-01	1.69E-01	Not Attained	Not Attained	0.05	0.8

Note: N/C refers to "not conducted" because of insufficient data (N<4); S/E indicates the sample mean significantly exceeds the cleanup level and thus no analysis is conducted; Sample Size is the number of concentration data in a sampling location that are used in the analysis; The Target Level is the expected mean concentration in wells after cleanup attainment, it is only used in individual well celanup status evaluation. The test for evaluating attainment status is from EPA (1992). Refer to Appendix A.6 of MAROS Manual for details.

Individual Well Cleanup Status - Optional Analysis Results

Project: Tronox 13 Wells Finch All Datta

User Name: Global Environmental

Location: Soda Springs

State: Idaho

From Period: 7/9/1997 **to** 5/5/2008

Well	Sample Size	Sample Mean	Sample Stdev.	Normal Distribution Assumption: Significantly < Cleanup Goal?	Normal: Power	Normal: Expected Sample Size	Lognormal Distribution Assumption: Significantly < Cleanup Goal?	Lognormal: Power	Lognormal: Expected Sample Size
MOLYBDENUM				Cleanup Goal (mg/L) = 0.18	Alpha Level = 0.05		Expected Power = 0.8		
Finch Spring	22	3.20E-01	1.20E-01	NO	S/E	S/E	NO	S/E	S/E
KM-13	22	5.22E-01	3.57E-01	NO	S/E	S/E	NO	S/E	S/E
KM-15	22	6.75E-01	3.42E-01	NO	S/E	S/E	NO	S/E	S/E
KM-16	22	1.13E+00	4.44E-01	NO	S/E	S/E	NO	S/E	S/E
KM-17	22	5.36E-01	1.16E-01	NO	S/E	S/E	NO	S/E	S/E
KM-2	22	2.33E+00	2.22E+00	NO	S/E	S/E	NO	S/E	S/E
KM-3	22	9.01E+00	4.92E+00	NO	S/E	S/E	NO	S/E	S/E
KM-4	22	5.22E+00	4.27E+00	NO	S/E	S/E	NO	S/E	S/E
KM-5	22	2.36E-01	8.60E-02	NO	S/E	S/E	NO	S/E	S/E
KM-6	22	1.64E+00	5.04E-01	NO	S/E	S/E	NO	S/E	S/E
KM-7	17	4.47E-01	6.48E-02	NO	S/E	S/E	NO	S/E	S/E
KM-8	22	5.57E+01	2.33E+01	NO	S/E	S/E	NO	S/E	S/E
KM-9	22	2.08E-01	5.59E-02	NO	S/E	S/E	NO	S/E	S/E
VANADIUM				Cleanup Goal (mg/L) = 0.26	Alpha Level = 0.05		Expected Power = 0.8		
Finch Spring	22	5.92E-02	1.29E-02	YES	1.000	<=3	YES	1.000	<=3
KM-13	22	6.29E-01	1.38E-01	NO	S/E	S/E	NO	S/E	S/E
KM-15	22	1.10E+00	2.37E-01	NO	S/E	S/E	NO	S/E	S/E
KM-16	22	2.92E+00	6.11E-01	NO	S/E	S/E	NO	S/E	S/E
KM-17	21	1.04E-02	6.02E-03	YES	1.000	<=3	YES	1.000	<=3
KM-2	22	6.57E+00	2.15E+00	NO	S/E	S/E	NO	S/E	S/E
KM-3	22	2.96E+00	9.88E-01	NO	S/E	S/E	NO	S/E	S/E
KM-4	22	7.47E+00	3.96E+00	NO	S/E	S/E	NO	S/E	S/E
KM-5	22	1.56E+00	4.61E-01	NO	S/E	S/E	NO	S/E	S/E
KM-6	22	4.66E+00	9.63E-01	NO	S/E	S/E	NO	S/E	S/E
KM-7	17	2.39E+00	3.08E-01	NO	S/E	S/E	NO	S/E	S/E
KM-8	22	1.87E+01	6.99E+00	NO	S/E	S/E	NO	S/E	S/E
KM-9	22	6.02E-01	1.69E-01	NO	S/E	S/E	NO	S/E	S/E

Note: N/C refers to "not conducted" because of insufficient data (N<4); S/E indicates the sample mean significantly exceeds the cleanup level and thus no analysis is conducted; Sample Size is the number of concentration data in a sampling location that are used in the power analysis; Expected Sample Size is the number of concentration data needed to reach the Expected Power under current sample variability; The Target Level is the expected mean concentration in wells after cleanup attainment, it is only used in individual well celanup status evaluation. The Student's t-test on mean difference is used in this analysis. Refer to Appendix A.6 of MAROS Manual for details.

MAROS Risk-Based Power Analysis for Site Cleanup

Project: Tronox 13 Wells Finch All Datta

Location: Soda Springs

User Name: Global Environmental

State: Idaho

Parameters:

Groundwater Flow Direction: 240 degrees **Distance to Receptor:** -1300 feet

From Period: Fall 97 **to** Spring 08

11/20/1997 5/5/2008

Selected Plume Centerline Wells:

Well	Distance to Receptor (feet)
KM-15	1121.3
KM-16	2080.3
KM-8	2694.5

The distance is measured in the Groundwater Flow Angle from the well to the compliance boundary.

				Normal Distribution Assumption			Lognormal Distribution Assumption				
Sample Event	Sample Size	Sample Mean	Sample Stdev.	Cleanup Status	Power	Expected Sample Size	Celanup Status	Power	Expected Sample Size	Alpha Level	Expected Power
MOLYBDENUM				Cleanup Goal = 0.18							
Fall 97	12	1.14E+00	3.87E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 98	12	1.01E+00	3.40E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 98	12	1.33E+00	4.58E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 99	12	1.00E+00	3.42E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 99	12	1.19E+00	4.08E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 00	13	8.94E-01	3.19E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 00	13	9.75E-01	3.49E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 01	13	9.82E-01	3.52E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 01	13	1.14E+00	4.08E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 02	13	8.44E-01	3.02E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 02	13	8.16E-01	2.92E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 03	13	6.07E-01	2.17E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 03	13	6.53E-01	2.34E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 04	13	5.93E-01	2.12E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 04	13	4.98E-01	1.77E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 05	13	5.86E-01	2.09E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 05	13	3.75E-01	1.33E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 06	13	2.74E-01	9.44E-01	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 06	13	4.17E-01	1.48E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 07	13	4.73E-01	1.69E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 07	13	5.08E-01	1.82E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 08	13	5.97E-01	2.14E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
VANADIUM				Cleanup Goal = 0.26							
Fall 97	12	2.14E-01	1.83E-01	Not Attained	0.212	99	Not Attained	S/E	S/E	0.05	0.8

Project: Tronox 13 Wells Finch All Datta **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Sample Event	Sample Szie	Sample Mean	Sample Stdev.	Normal Distribution Assumption: Cleanup Status	Power	Expected Sample Size	Lognormal Distribution Assumption: Celanup Status	Power	Expected Sample Size	Alpha Level	Expected Power
VANADIUM				Cleanup Goal = 0.26							
Spring 98	11	2.19E-01	1.81E-01	Not Attained	0.181	>100	Not Attained	0.061	>100	0.05	0.8
Fall 98	12	1.70E-01	1.44E-01	Attained	0.679	17	Not Attained	S/E	S/E	0.05	0.8
Spring 99	12	1.91E-01	1.57E-01	Not Attained	0.435	33	Not Attained	S/E	S/E	0.05	0.8
Fall 99	12	1.28E-01	1.27E-01	Attained	0.968	7	Not Attained	S/E	S/E	0.05	0.8
Spring 00	13	9.41E-02	1.71E-01	Attained	0.960	8	Not Attained	0.131	>100	0.05	0.8
Fall 00	13	7.73E-02	1.42E-01	Attained	0.998	5	Not Attained	0.106	>100	0.05	0.8
Spring 01	13	9.29E-02	1.60E-01	Attained	0.977	7	Not Attained	S/E	S/E	0.05	0.8
Fall 01	13	1.11E-01	2.85E-01	Attained	0.573	24	Not Attained	S/E	S/E	0.05	0.8
Spring 02	13	8.73E-02	1.99E-01	Attained	0.919	9	Not Attained	S/E	S/E	0.05	0.8
Fall 02	13	9.43E-02	2.57E-01	Attained	0.729	16	Not Attained	S/E	S/E	0.05	0.8
Spring 03	13	8.20E-02	1.81E-01	Attained	0.964	8	Not Attained	S/E	S/E	0.05	0.8
Fall 03	13	1.07E-01	3.07E-01	Attained	0.540	26	Not Attained	S/E	S/E	0.05	0.8
Spring 04	13	8.87E-02	2.30E-01	Attained	0.832	12	Not Attained	0.155	>100	0.05	0.8
Fall 04	13	9.94E-02	2.98E-01	Attained	0.597	22	Not Attained	0.090	>100	0.05	0.8
Spring 05	13	7.68E-02	1.66E-01	Attained	0.987	6	Not Attained	0.075	>100	0.05	0.8
Fall 05	13	7.91E-02	2.06E-01	Attained	0.924	9	Not Attained	0.125	>100	0.05	0.8
Spring 06	13	7.52E-02	1.31E-01	Attained	1.000	4	Not Attained	0.057	>100	0.05	0.8
Fall 06	13	7.29E-02	1.72E-01	Attained	0.985	7	Not Attained	0.177	>100	0.05	0.8
Spring 07	13	7.55E-02	1.65E-01	Attained	0.989	6	Not Attained	0.252	81	0.05	0.8
Fall 07	13	8.08E-02	2.12E-01	Attained	0.907	10	Not Attained	0.152	>100	0.05	0.8
Spring 08	13	7.75E-02	1.76E-01	Attained	0.976	7	Not Attained	0.237	89	0.05	0.8

Note: #N/C means "not conducted" due to a small sample size (N<4) or that the mean concentration is much greater than the cleanup level; Sample Size is the number of sampling locations used in the power analysis; Expected Sample Size is the number of concentration data needed to reach the Expected Power under current sample variability.

MAROS Zeroth Moment Analysis

Project: Tronox V MO 13 wells Finch All

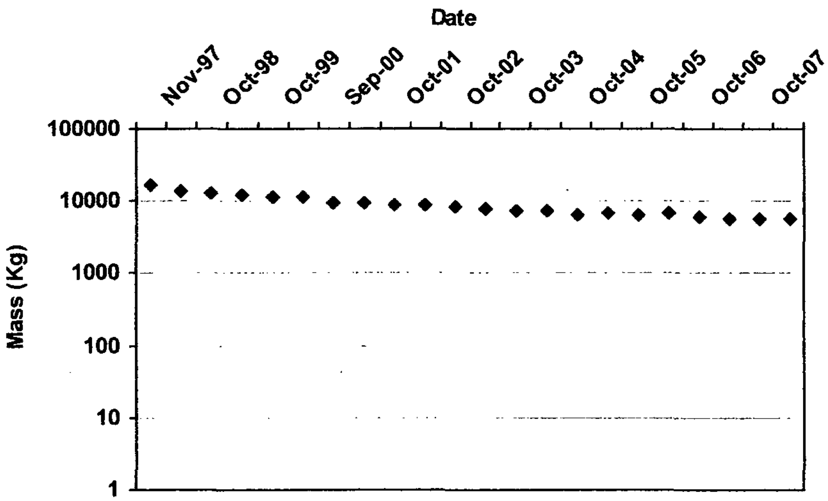
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Change in Dissolved Mass Over Time



Porosity: 0.20

Saturated Thickness:

Uniform: 200 ft

Mann Kendall S Statistic:

-215

Confidence in Trend:

100.0%

Coefficient of Variation:

0.33

Zeroth Moment Trend:

D

Data Table:

Effective Date	Constituent	Estimated Mass (Kg)	Number of Wells
11/20/1997	MOLYBDENUM	1.7E+04	12
5/5/1998	MOLYBDENUM	1.4E+04	12
10/27/1998	MOLYBDENUM	1.3E+04	12
5/4/1999	MOLYBDENUM	1.2E+04	12
10/5/1999	MOLYBDENUM	1.1E+04	12
5/8/2000	MOLYBDENUM	1.1E+04	13
9/25/2000	MOLYBDENUM	9.2E+03	13
4/27/2001	MOLYBDENUM	9.5E+03	13
10/26/2001	MOLYBDENUM	9.1E+03	13
5/31/2002	MOLYBDENUM	8.7E+03	13
10/18/2002	MOLYBDENUM	8.3E+03	13
5/31/2003	MOLYBDENUM	7.9E+03	13
10/23/2003	MOLYBDENUM	7.3E+03	13
5/3/2004	MOLYBDENUM	7.5E+03	13
10/13/2004	MOLYBDENUM	6.5E+03	13
5/3/2005	MOLYBDENUM	7.0E+03	13
10/25/2005	MOLYBDENUM	6.5E+03	13
5/15/2006	MOLYBDENUM	7.0E+03	13
10/23/2006	MOLYBDENUM	6.1E+03	13
5/14/2007	MOLYBDENUM	5.8E+03	13
10/15/2007	MOLYBDENUM	5.9E+03	13
5/5/2008	MOLYBDENUM	5.8E+03	13

MAROS Zeroth Moment Analysis

Effective Date	Constituent	Estimated Mass (Kg)	Number of Wells

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect. Moments are not calculated for sample events with less than 6 wells.

MAROS First Moment Analysis

Project: Tronox V MO 13 wells Finch All

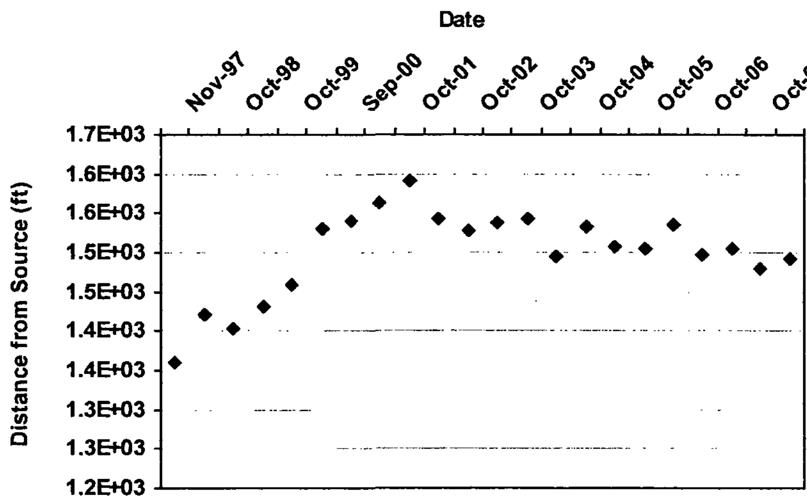
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Distance from Source to Center of Mass



Mann Kendall S Statistic: 15

Confidence in Trend: 65.2%

Coefficient of Variation: 0.04

First Moment Trend: NT

Data Table:

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
11/20/1997	MOLYBDENUM	658,948	371,066	1,361	12
5/5/1998	MOLYBDENUM	658,808	371,094	1,420	12
10/27/1998	MOLYBDENUM	658,883	371,060	1,402	12
5/4/1999	MOLYBDENUM	658,825	371,067	1,431	12
10/5/1999	MOLYBDENUM	658,838	371,022	1,460	12
5/8/2000	MOLYBDENUM	658,803	370,961	1,530	13
9/25/2000	MOLYBDENUM	658,821	370,934	1,541	13
4/27/2001	MOLYBDENUM	658,786	370,932	1,563	13
10/26/2001	MOLYBDENUM	658,818	370,876	1,591	13
5/31/2002	MOLYBDENUM	658,821	370,930	1,544	13
10/18/2002	MOLYBDENUM	658,835	370,941	1,527	13
5/31/2003	MOLYBDENUM	658,844	370,921	1,539	13
10/23/2003	MOLYBDENUM	658,836	370,922	1,543	13
5/3/2004	MOLYBDENUM	658,849	370,970	1,495	13
10/13/2004	MOLYBDENUM	658,830	370,938	1,533	13
5/3/2005	MOLYBDENUM	658,802	370,989	1,508	13
10/25/2005	MOLYBDENUM	658,833	370,969	1,506	13
5/15/2006	MOLYBDENUM	658,767	370,979	1,537	13
10/23/2006	MOLYBDENUM	658,812	370,995	1,497	13
5/14/2007	MOLYBDENUM	658,792	371,000	1,505	13
0/15/2007	MOLYBDENUM	658,830	371,003	1,479	13
/5/2008	MOLYBDENUM	658,795	371,013	1,493	13

MAROS First Moment Analysis

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

MAROS First Moment Analysis

Project: Tronox V MO 13 wells Finch All

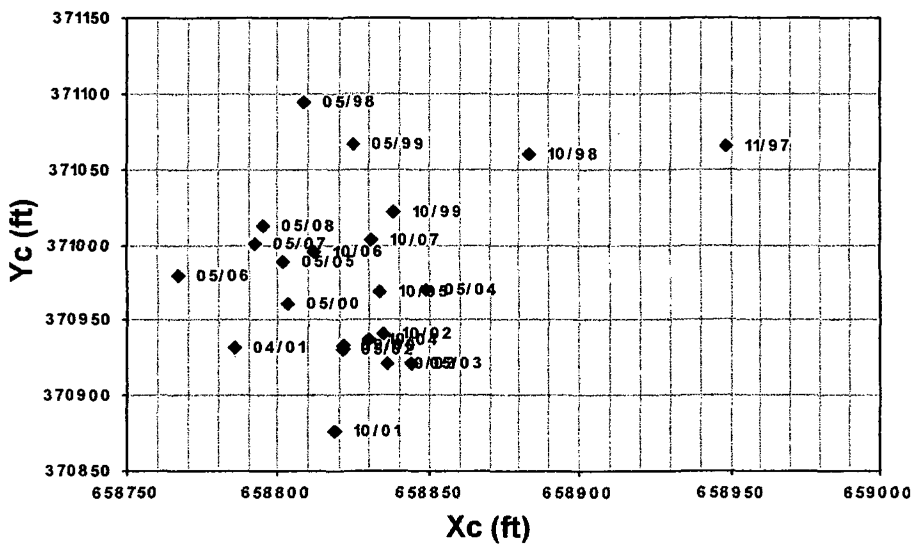
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Change in Location of Center of Mass Over Time



Groundwater Flow Direction:

Source Coordinate:

X: 659,700

Y: 372,200

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
11/20/1997	MOLYBDENUM	658,948	371,066	1,361	12
5/5/1998	MOLYBDENUM	658,808	371,094	1,420	12
10/27/1998	MOLYBDENUM	658,883	371,060	1,402	12
5/4/1999	MOLYBDENUM	658,825	371,067	1,431	12
10/5/1999	MOLYBDENUM	658,838	371,022	1,460	12
5/8/2000	MOLYBDENUM	658,803	370,961	1,530	13
9/25/2000	MOLYBDENUM	658,821	370,934	1,541	13
4/27/2001	MOLYBDENUM	658,786	370,932	1,563	13
10/26/2001	MOLYBDENUM	658,818	370,876	1,591	13
5/31/2002	MOLYBDENUM	658,821	370,930	1,544	13
10/18/2002	MOLYBDENUM	658,835	370,941	1,527	13
5/31/2003	MOLYBDENUM	658,844	370,921	1,539	13
10/23/2003	MOLYBDENUM	658,836	370,922	1,543	13
5/3/2004	MOLYBDENUM	658,849	370,970	1,495	13
10/13/2004	MOLYBDENUM	658,830	370,938	1,533	13
5/3/2005	MOLYBDENUM	658,802	370,989	1,508	13
10/25/2005	MOLYBDENUM	658,833	370,969	1,506	13
5/15/2006	MOLYBDENUM	658,767	370,979	1,537	13
10/23/2006	MOLYBDENUM	658,812	370,995	1,497	13
5/14/2007	MOLYBDENUM	658,792	371,000	1,505	13
10/15/2007	MOLYBDENUM	658,830	371,003	1,479	13
5/5/2008	MOLYBDENUM	658,795	371,013	1,493	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

MAROS Second Moment Analysis

Project: Tronox V MO 13 wells Finch All

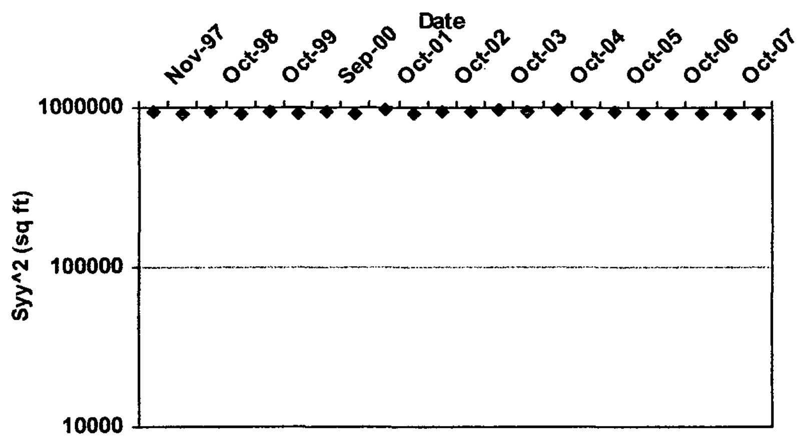
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Change in Plume Spread Over Time

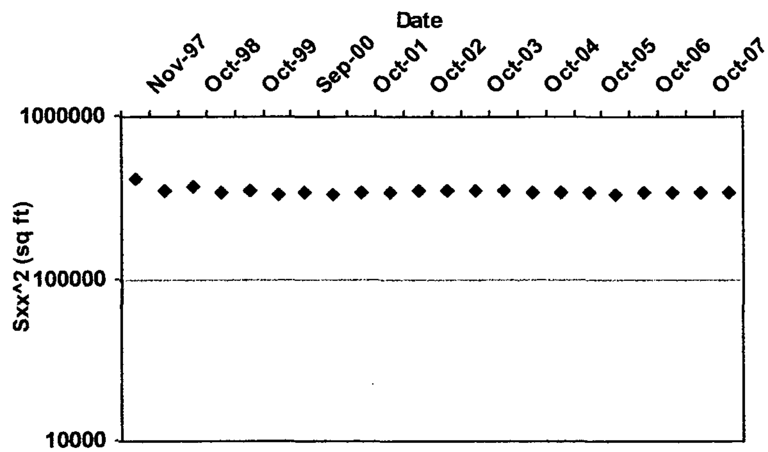


Mann Kendall S Statistic: -45

Confidence in Trend: 89.1%

Coefficient of Variation: 0.02

Second Moment Trend: S



Mann Kendall S Statistic: -59

Confidence in Trend: 94.9%

Coefficient of Variation: 0.05

Second Moment Trend: PD

Data Table:

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
11/20/1997	MOLYBDENUM	416,438	934,664	12
5/5/1998	MOLYBDENUM	354,991	927,772	12
10/27/1998	MOLYBDENUM	376,429	933,047	12
5/4/1999	MOLYBDENUM	344,161	911,643	12
10/5/1999	MOLYBDENUM	352,137	931,176	12
5/8/2000	MOLYBDENUM	331,737	923,939	13
9/25/2000	MOLYBDENUM	345,045	943,129	13
4/27/2001	MOLYBDENUM	334,295	927,448	13
10/26/2001	MOLYBDENUM	340,709	966,418	13
/31/2002	MOLYBDENUM	344,124	930,287	13
10/18/2002	MOLYBDENUM	348,997	948,373	13
5/31/2003	MOLYBDENUM	350,135	946,276	13

MAROS Second Moment Analysis

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
10/23/2003	MOLYBDENUM	347,173	960,632	13
5/3/2004	MOLYBDENUM	353,448	944,021	13
10/13/2004	MOLYBDENUM	345,286	963,167	13
5/3/2005	MOLYBDENUM	345,273	918,992	13
10/25/2005	MOLYBDENUM	344,793	934,475	13
5/15/2006	MOLYBDENUM	328,271	911,206	13
10/23/2006	MOLYBDENUM	345,488	913,682	13
5/14/2007	MOLYBDENUM	342,660	907,972	13
10/15/2007	MOLYBDENUM	346,430	914,812	13
5/5/2008	MOLYBDENUM	341,124	911,775	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events)

The Sigma XX and Sigma YY components are estimated using the given field coordinate system and then rotated to align with the estimated groundwater flow direction. Moments are not calculated for sample events with less than 6 wells.

MAROS Zeroth Moment Analysis

Project: Tronox V MO 13 wells Finch All

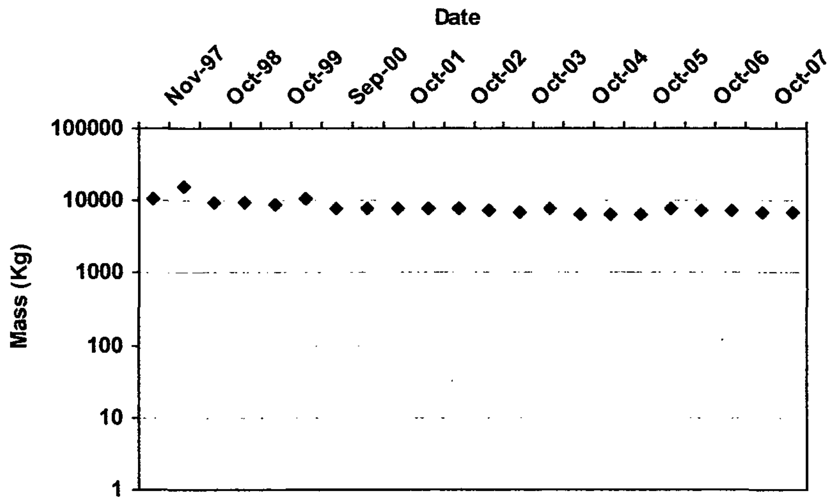
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: VANADIUM

Change in Dissolved Mass Over Time



Porosity: 0.20

Saturated Thickness:

Uniform: 200 ft

Mann Kendall S Statistic:

-141

Confidence in Trend:

100.0%

Coefficient of Variation:

0.26

Zeroth Moment Trend:

D

Data Table:

Effective Date	Constituent	Estimated Mass (Kg)	Number of Wells
11/20/1997	VANADIUM	1.1E+04	12
5/5/1998	VANADIUM	1.6E+04	11
10/27/1998	VANADIUM	9.6E+03	12
5/4/1999	VANADIUM	9.7E+03	12
10/5/1999	VANADIUM	9.2E+03	12
5/8/2000	VANADIUM	1.0E+04	13
9/25/2000	VANADIUM	7.6E+03	13
4/27/2001	VANADIUM	8.1E+03	13
10/26/2001	VANADIUM	7.9E+03	13
5/31/2002	VANADIUM	7.7E+03	13
10/18/2002	VANADIUM	7.7E+03	13
5/31/2003	VANADIUM	7.2E+03	13
10/23/2003	VANADIUM	6.8E+03	13
5/3/2004	VANADIUM	7.8E+03	13
10/13/2004	VANADIUM	6.6E+03	13
5/3/2005	VANADIUM	6.4E+03	13
10/25/2005	VANADIUM	6.6E+03	13
5/15/2006	VANADIUM	8.0E+03	13
10/23/2006	VANADIUM	7.2E+03	13
5/14/2007	VANADIUM	7.5E+03	13
10/15/2007	VANADIUM	7.1E+03	13
5/5/2008	VANADIUM	7.1E+03	13

MAROS Zeroth Moment Analysis

Effective Date	Constituent	Estimated Mass (Kg)	Number of Wells

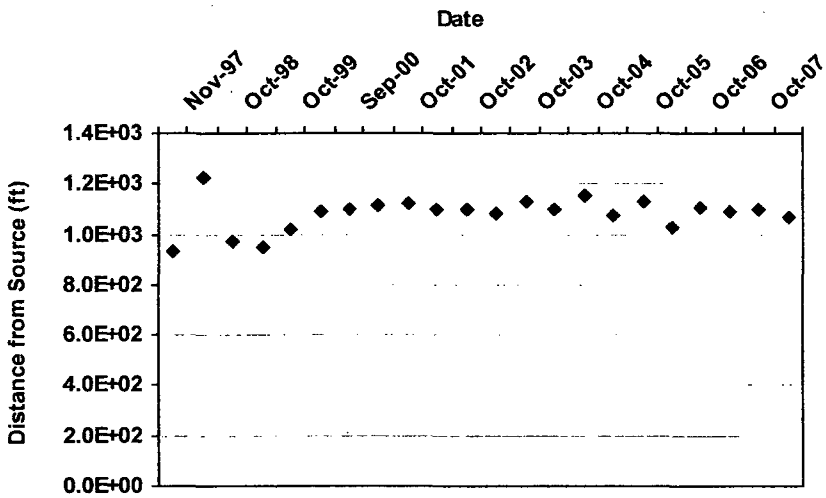
Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect. Moments are not calculated for sample events with less than 6 wells.

MAROS First Moment Analysis

Project: Tronox V MO 13 wells Finch All
User Name: Global Environmental
Location: Soda Springs
State: Idaho

COC: VANADIUM

Distance from Source to Center of Mass



Mann Kendall S Statistic: 33

Confidence in Trend: 81.4%

Coefficient of Variation: 0.06

First Moment Trend: NT

Data Table:

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
11/20/1997	VANADIUM	658,898	371,723	933	12
5/5/1998	VANADIUM	658,846	371,323	1,224	11
10/27/1998	VANADIUM	658,872	371,692	972	12
5/4/1999	VANADIUM	658,874	371,731	950	12
10/5/1999	VANADIUM	658,843	371,650	1,018	12
5/8/2000	VANADIUM	658,773	371,624	1,091	13
9/25/2000	VANADIUM	658,750	371,647	1,099	13
4/27/2001	VANADIUM	658,731	371,647	1,116	13
10/26/2001	VANADIUM	658,730	371,627	1,126	13
5/31/2002	VANADIUM	658,735	371,679	1,096	13
10/18/2002	VANADIUM	658,729	371,691	1,096	13
5/31/2003	VANADIUM	658,743	371,694	1,082	13
10/23/2003	VANADIUM	658,704	371,660	1,133	13
5/3/2004	VANADIUM	658,759	371,624	1,103	13
10/13/2004	VANADIUM	658,693	371,633	1,155	13
5/3/2005	VANADIUM	658,755	371,683	1,078	13
10/25/2005	VANADIUM	658,717	371,644	1,130	13
5/15/2006	VANADIUM	658,783	371,739	1,026	13
10/23/2006	VANADIUM	658,745	371,639	1,108	13
5/14/2007	VANADIUM	658,778	371,613	1,093	13
10/15/2007	VANADIUM	658,754	371,644	1,097	13
5/5/2008	VANADIUM	658,802	371,621	1,068	13

MAROS First Moment Analysis

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

MAROS First Moment Analysis

Project: Tronox V MO 13 wells Finch All

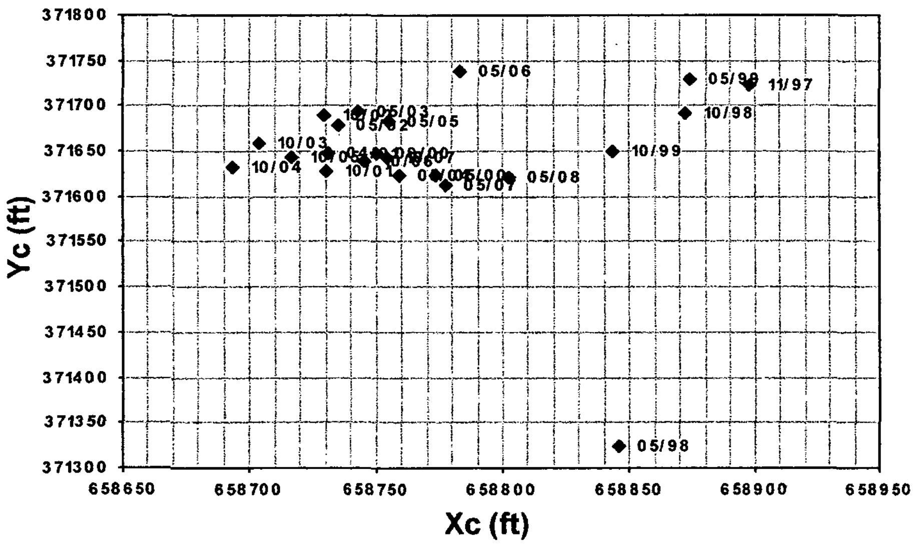
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: VANADIUM

Change in Location of Center of Mass Over Time



Groundwater Flow Direction:

Source Coordinate:

X: 659,700

Y: 372,200

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
11/20/1997	VANADIUM	658,898	371,723	933	12
5/5/1998	VANADIUM	658,846	371,323	1,224	11
10/27/1998	VANADIUM	658,872	371,692	972	12
5/4/1999	VANADIUM	658,874	371,731	950	12
10/5/1999	VANADIUM	658,843	371,650	1,018	12
5/8/2000	VANADIUM	658,773	371,624	1,091	13
9/25/2000	VANADIUM	658,750	371,647	1,099	13
4/27/2001	VANADIUM	658,731	371,647	1,116	13
10/26/2001	VANADIUM	658,730	371,627	1,126	13
5/31/2002	VANADIUM	658,735	371,679	1,096	13
10/18/2002	VANADIUM	658,729	371,691	1,096	13
5/31/2003	VANADIUM	658,743	371,694	1,082	13
10/23/2003	VANADIUM	658,704	371,660	1,133	13
5/3/2004	VANADIUM	658,759	371,624	1,103	13
10/13/2004	VANADIUM	658,693	371,633	1,155	13
5/3/2005	VANADIUM	658,755	371,683	1,078	13
10/25/2005	VANADIUM	658,717	371,644	1,130	13
5/15/2006	VANADIUM	658,783	371,739	1,026	13
10/23/2006	VANADIUM	658,745	371,639	1,108	13
5/14/2007	VANADIUM	658,778	371,613	1,093	13
10/15/2007	VANADIUM	658,754	371,644	1,097	13
5/5/2008	VANADIUM	658,802	371,621	1,068	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

MAROS Second Moment Analysis

Project: Tronox V MO 13 wells Finch All

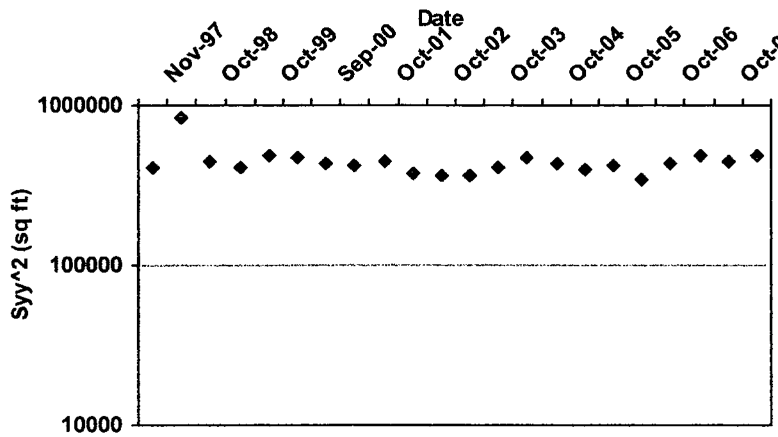
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: VANADIUM

Change in Plume Spread Over Time

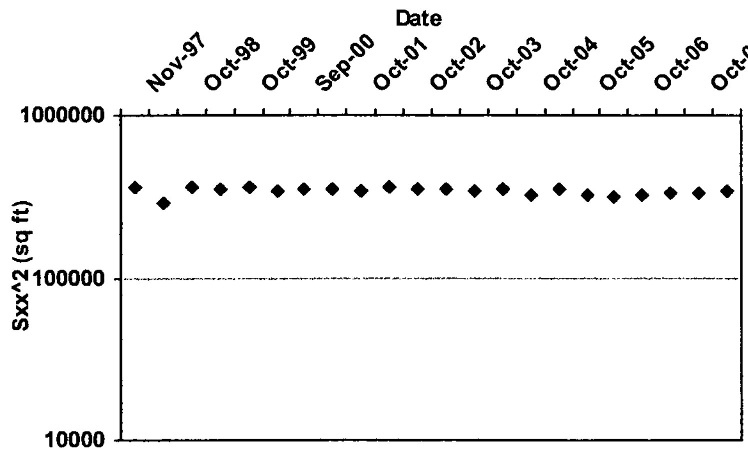


Mann Kendall S Statistic: -5

Confidence in Trend: 54.4%

Coefficient of Variation: 0.22

Second Moment Trend: S



Mann Kendall S Statistic: -95

Confidence in Trend: 99.7%

Coefficient of Variation: 0.05

Second Moment Trend: D

Data Table:

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
11/20/1997	VANADIUM	364,272	404,774	12
5/5/1998	VANADIUM	290,642	839,895	11
10/27/1998	VANADIUM	365,519	446,526	12
5/4/1999	VANADIUM	355,209	410,341	12
10/5/1999	VANADIUM	362,561	485,361	12
5/8/2000	VANADIUM	343,130	473,459	13
9/25/2000	VANADIUM	353,572	432,128	13
4/27/2001	VANADIUM	347,942	421,823	13
10/26/2001	VANADIUM	346,191	452,600	13
/31/2002	VANADIUM	361,773	371,379	13
10/18/2002	VANADIUM	349,778	368,600	13
5/31/2003	VANADIUM	354,198	370,304	13

MAROS Second Moment Analysis

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
10/23/2003	VANADIUM	338,911	404,914	13
5/3/2004	VANADIUM	348,179	466,673	13
10/13/2004	VANADIUM	323,330	439,755	13
5/3/2005	VANADIUM	351,051	398,310	13
10/25/2005	VANADIUM	324,212	421,811	13
5/15/2006	VANADIUM	314,225	345,668	13
10/23/2006	VANADIUM	319,837	433,967	13
5/14/2007	VANADIUM	330,251	485,674	13
10/15/2007	VANADIUM	331,495	442,587	13
5/5/2008	VANADIUM	343,745	486,609	13

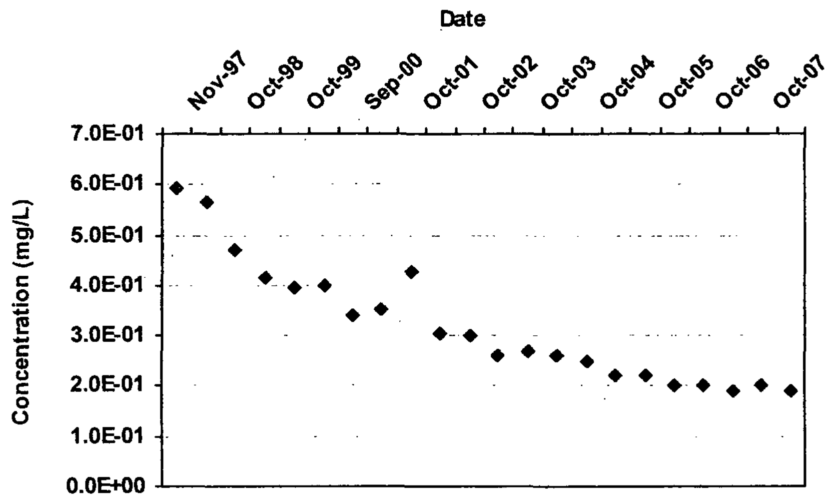
Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events)

The Sigma XX and Sigma YY components are estimated using the given field coordinate system and then rotated to align with the estimated groundwater flow direction. Moments are not calculated for sample events with less than 6 wells.

MAROS Mann-Kendall Statistics Summary

Well: Finch Spring
Well Type: T
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -207

Confidence in Trend: 100.0%

Coefficient of Variation: 0.38

Mann Kendall Concentration Trend: (See Note) D

Data Table:

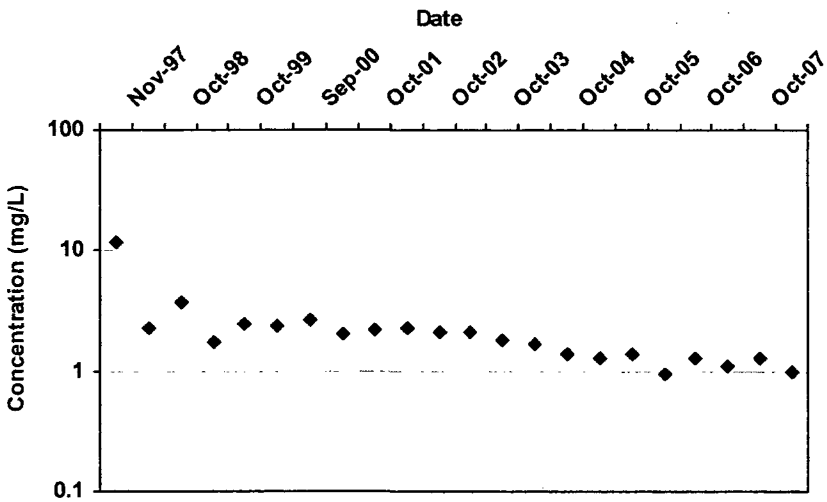
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
Finch Spring	T	11/20/1997	MOLYBDENUM	5.9E-01		1	1
Finch Spring	T	5/5/1998	MOLYBDENUM	5.6E-01		1	1
Finch Spring	T	10/27/1998	MOLYBDENUM	4.7E-01		1	1
Finch Spring	T	5/4/1999	MOLYBDENUM	4.2E-01		1	1
Finch Spring	T	10/5/1999	MOLYBDENUM	4.0E-01		1	1
Finch Spring	T	5/8/2000	MOLYBDENUM	4.0E-01		1	1
Finch Spring	T	9/25/2000	MOLYBDENUM	3.4E-01		1	1
Finch Spring	T	4/27/2001	MOLYBDENUM	3.5E-01		1	1
Finch Spring	T	10/26/2001	MOLYBDENUM	4.3E-01		1	1
Finch Spring	T	5/31/2002	MOLYBDENUM	3.1E-01		1	1
Finch Spring	T	10/18/2002	MOLYBDENUM	3.0E-01		1	1
Finch Spring	T	5/31/2003	MOLYBDENUM	2.6E-01		1	1
Finch Spring	T	10/23/2003	MOLYBDENUM	2.7E-01		1	1
Finch Spring	T	5/3/2004	MOLYBDENUM	2.6E-01		1	1
Finch Spring	T	10/13/2004	MOLYBDENUM	2.5E-01		1	1
Finch Spring	T	5/3/2005	MOLYBDENUM	2.2E-01		1	1
Finch Spring	T	10/25/2005	MOLYBDENUM	2.2E-01		1	1
Finch Spring	T	5/15/2006	MOLYBDENUM	2.0E-01		1	1
Finch Spring	T	10/23/2006	MOLYBDENUM	2.0E-01		1	1
Finch Spring	T	5/14/2007	MOLYBDENUM	1.9E-01		1	1
Finch Spring	T	10/15/2007	MOLYBDENUM	2.0E-01		1	1
Finch Spring	T	5/5/2008	MOLYBDENUM	1.9E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-2
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:

-174

Confidence in Trend:

100.0%

Coefficient of Variation:

0.95

Mann Kendall Concentration Trend: (See Note)

D

Data Table:

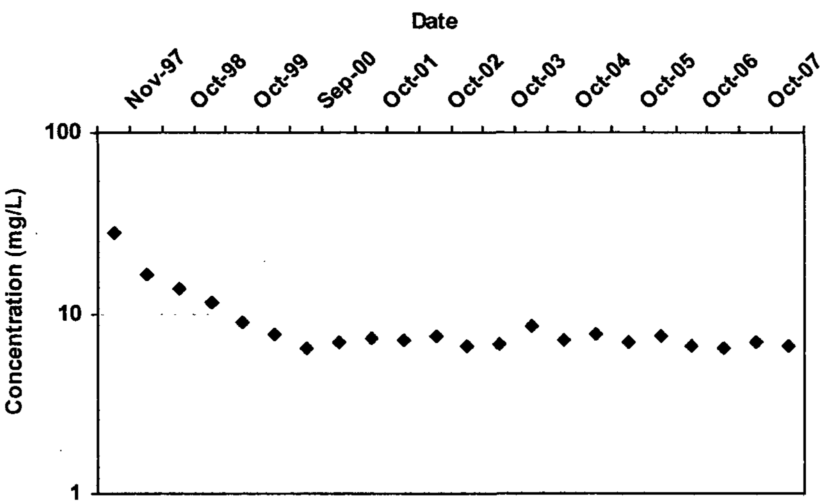
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-2	S	11/20/1997	MOLYBDENUM	1.2E+01		1	1
KM-2	S	5/5/1998	MOLYBDENUM	2.3E+00		1	1
KM-2	S	10/27/1998	MOLYBDENUM	3.8E+00		1	1
KM-2	S	5/4/1999	MOLYBDENUM	1.8E+00		1	1
KM-2	S	10/5/1999	MOLYBDENUM	2.5E+00		1	1
KM-2	S	5/8/2000	MOLYBDENUM	2.4E+00		1	1
KM-2	S	9/25/2000	MOLYBDENUM	2.7E+00		1	1
KM-2	S	4/28/2001	MOLYBDENUM	2.1E+00		1	1
KM-2	S	10/26/2001	MOLYBDENUM	2.2E+00		1	1
KM-2	S	5/31/2002	MOLYBDENUM	2.3E+00		1	1
KM-2	S	10/18/2002	MOLYBDENUM	2.1E+00		1	1
KM-2	S	5/31/2003	MOLYBDENUM	2.1E+00		1	1
KM-2	S	10/23/2003	MOLYBDENUM	1.8E+00		1	1
KM-2	S	5/3/2004	MOLYBDENUM	1.7E+00		1	1
KM-2	S	10/17/2004	MOLYBDENUM	1.4E+00		1	1
KM-2	S	5/3/2005	MOLYBDENUM	1.3E+00		1	1
KM-2	S	10/25/2005	MOLYBDENUM	1.4E+00		1	1
KM-2	S	5/16/2006	MOLYBDENUM	9.6E-01		1	1
KM-2	S	10/23/2006	MOLYBDENUM	1.3E+00		1	1
KM-2	S	5/14/2007	MOLYBDENUM	1.1E+00		1	1
KM-2	S	10/15/2007	MOLYBDENUM	1.3E+00		1	1
KM-2	S	5/5/2008	MOLYBDENUM	1.0E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-3
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 to 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -121

Confidence in Trend: 100.0%

Coefficient of Variation: 0.55

Mann Kendall Concentration Trend: (See Note) D

Data Table:

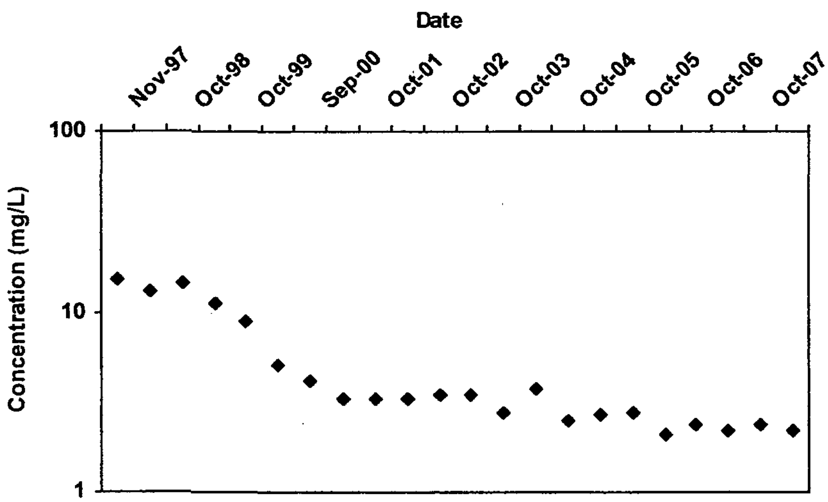
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-3	S	11/20/1997	MOLYBDENUM	2.8E+01		1	1
KM-3	S	5/5/1998	MOLYBDENUM	1.6E+01		1	1
KM-3	S	10/27/1998	MOLYBDENUM	1.4E+01		1	1
KM-3	S	5/4/1999	MOLYBDENUM	1.1E+01		1	1
KM-3	S	10/5/1999	MOLYBDENUM	8.8E+00		1	1
KM-3	S	5/8/2000	MOLYBDENUM	7.6E+00		1	1
KM-3	S	9/25/2000	MOLYBDENUM	6.4E+00		1	1
KM-3	S	4/28/2001	MOLYBDENUM	6.9E+00		1	1
KM-3	S	10/26/2001	MOLYBDENUM	7.4E+00		1	1
KM-3	S	5/31/2002	MOLYBDENUM	7.1E+00		1	1
KM-3	S	10/18/2002	MOLYBDENUM	7.5E+00		1	1
KM-3	S	5/31/2003	MOLYBDENUM	6.6E+00		1	1
KM-3	S	10/23/2003	MOLYBDENUM	6.8E+00		1	1
KM-3	S	5/3/2004	MOLYBDENUM	8.4E+00		1	1
KM-3	S	10/17/2004	MOLYBDENUM	7.1E+00		1	1
KM-3	S	5/3/2005	MOLYBDENUM	7.7E+00		1	1
KM-3	S	10/25/2005	MOLYBDENUM	6.9E+00		1	1
KM-3	S	5/16/2006	MOLYBDENUM	7.4E+00		1	1
KM-3	S	10/23/2006	MOLYBDENUM	6.6E+00		1	1
KM-3	S	5/14/2007	MOLYBDENUM	6.4E+00		1	1
KM-3	S	10/15/2007	MOLYBDENUM	6.9E+00		1	1
KM-3	S	5/5/2008	MOLYBDENUM	6.5E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-4
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-183

Confidence in Trend:
100.0%

Coefficient of Variation:
0.82

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

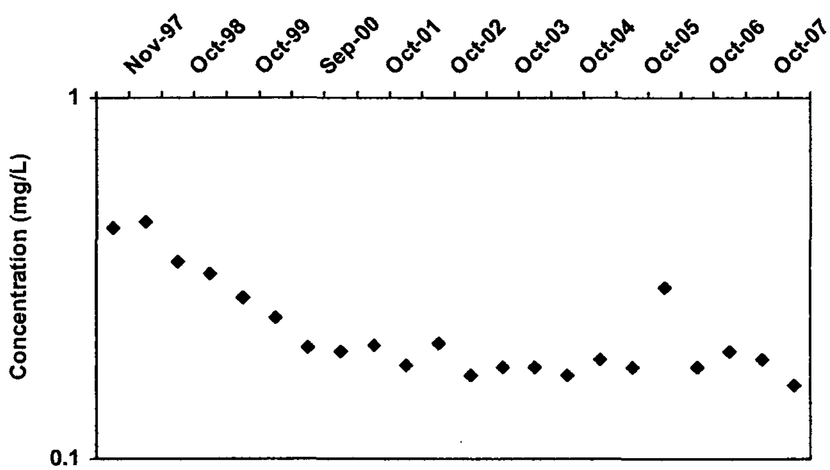
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-4	S	11/20/1997	MOLYBDENUM	1.5E+01		1	1
KM-4	S	5/5/1998	MOLYBDENUM	1.3E+01		1	1
KM-4	S	10/27/1998	MOLYBDENUM	1.4E+01		1	1
KM-4	S	5/4/1999	MOLYBDENUM	1.1E+01		1	1
KM-4	S	10/5/1999	MOLYBDENUM	9.0E+00		1	1
KM-4	S	5/8/2000	MOLYBDENUM	5.1E+00		1	1
KM-4	S	9/25/2000	MOLYBDENUM	4.1E+00		1	1
KM-4	S	4/28/2001	MOLYBDENUM	3.3E+00		1	1
KM-4	S	10/26/2001	MOLYBDENUM	3.3E+00		1	1
KM-4	S	5/31/2002	MOLYBDENUM	3.3E+00		1	1
KM-4	S	10/18/2002	MOLYBDENUM	3.5E+00		1	1
KM-4	S	5/31/2003	MOLYBDENUM	3.5E+00		1	1
KM-4	S	10/23/2003	MOLYBDENUM	2.8E+00		1	1
KM-4	S	5/3/2004	MOLYBDENUM	3.8E+00		1	1
KM-4	S	10/17/2004	MOLYBDENUM	2.5E+00		1	1
KM-4	S	5/3/2005	MOLYBDENUM	2.7E+00		1	1
KM-4	S	10/25/2005	MOLYBDENUM	2.8E+00		1	1
KM-4	S	5/16/2006	MOLYBDENUM	2.1E+00		1	1
KM-4	S	10/23/2006	MOLYBDENUM	2.4E+00		1	1
KM-4	S	5/14/2007	MOLYBDENUM	2.2E+00		1	1
KM-4	S	10/15/2007	MOLYBDENUM	2.4E+00		1	1
KM-4	S	5/5/2008	MOLYBDENUM	2.2E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-5
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:

-130

Confidence in Trend:

100.0%

Coefficient of Variation:

0.36

Mann Kendall Concentration Trend: (See Note)

D

Data Table:

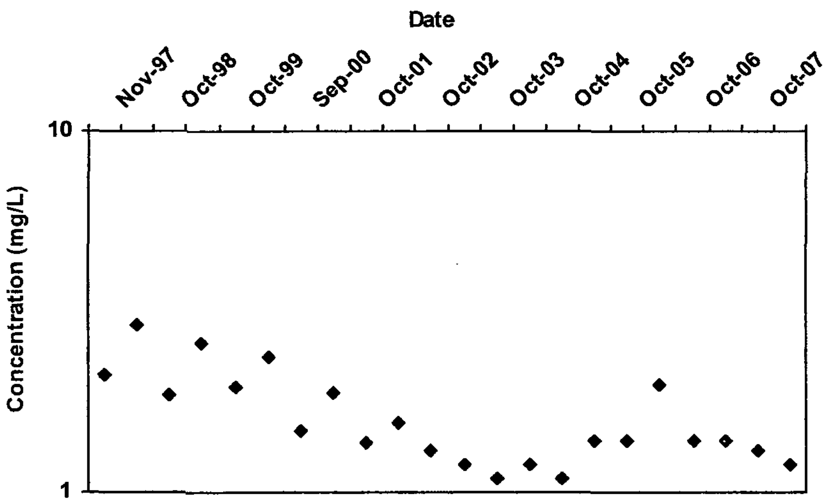
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-5	S	11/20/1997	MOLYBDENUM	4.4E-01		1	1
KM-5	S	5/5/1998	MOLYBDENUM	4.5E-01		1	1
KM-5	S	10/27/1998	MOLYBDENUM	3.5E-01		1	1
KM-5	S	5/4/1999	MOLYBDENUM	3.3E-01		1	1
KM-5	S	10/5/1999	MOLYBDENUM	2.8E-01		1	1
KM-5	S	5/8/2000	MOLYBDENUM	2.5E-01		1	1
KM-5	S	9/25/2000	MOLYBDENUM	2.1E-01		1	1
KM-5	S	4/28/2001	MOLYBDENUM	2.0E-01		1	1
KM-5	S	10/26/2001	MOLYBDENUM	2.1E-01		1	1
KM-5	S	5/31/2002	MOLYBDENUM	1.8E-01		1	1
KM-5	S	10/18/2002	MOLYBDENUM	2.1E-01		1	1
KM-5	S	5/31/2003	MOLYBDENUM	1.7E-01		1	1
KM-5	S	10/23/2003	MOLYBDENUM	1.8E-01		1	1
KM-5	S	5/3/2004	MOLYBDENUM	1.8E-01		1	1
KM-5	S	10/17/2004	MOLYBDENUM	1.7E-01		1	1
KM-5	S	5/3/2005	MOLYBDENUM	1.9E-01		1	1
KM-5	S	10/25/2005	MOLYBDENUM	1.8E-01		1	1
KM-5	S	5/16/2006	MOLYBDENUM	3.0E-01		1	1
KM-5	S	10/23/2006	MOLYBDENUM	1.8E-01		1	1
KM-5	S	5/14/2007	MOLYBDENUM	2.0E-01		1	1
KM-5	S	10/15/2007	MOLYBDENUM	1.9E-01		1	1
KM-5	S	5/5/2008	MOLYBDENUM	1.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-6
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-110

Confidence in Trend:
99.9%

Coefficient of Variation:
0.31

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

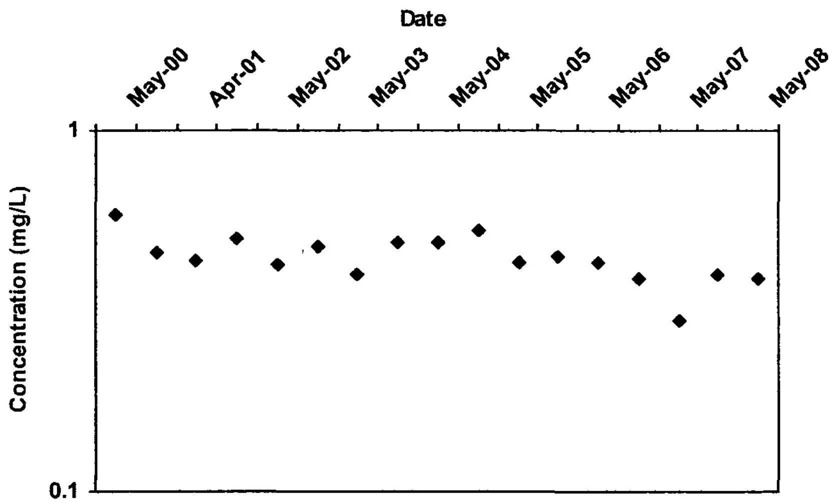
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-6	S	11/20/1997	MOLYBDENUM	2.1E+00		1	1
KM-6	S	5/5/1998	MOLYBDENUM	2.9E+00		1	1
KM-6	S	10/27/1998	MOLYBDENUM	1.9E+00		1	1
KM-6	S	5/4/1999	MOLYBDENUM	2.6E+00		1	1
KM-6	S	10/5/1999	MOLYBDENUM	2.0E+00		1	1
KM-6	S	5/8/2000	MOLYBDENUM	2.4E+00		1	1
KM-6	S	9/25/2000	MOLYBDENUM	1.5E+00		1	1
KM-6	S	4/28/2001	MOLYBDENUM	1.9E+00		1	1
KM-6	S	10/26/2001	MOLYBDENUM	1.4E+00		1	1
KM-6	S	5/31/2002	MOLYBDENUM	1.6E+00		1	1
KM-6	S	10/18/2002	MOLYBDENUM	1.3E+00		1	1
KM-6	S	5/31/2003	MOLYBDENUM	1.2E+00		1	1
KM-6	S	10/23/2003	MOLYBDENUM	1.1E+00		1	1
KM-6	S	5/3/2004	MOLYBDENUM	1.2E+00		1	1
KM-6	S	10/17/2004	MOLYBDENUM	1.1E+00		1	1
KM-6	S	5/3/2005	MOLYBDENUM	1.4E+00		1	1
KM-6	S	10/25/2005	MOLYBDENUM	1.4E+00		1	1
KM-6	S	5/16/2006	MOLYBDENUM	2.0E+00		1	1
KM-6	S	10/23/2006	MOLYBDENUM	1.4E+00		1	1
KM-6	S	5/14/2007	MOLYBDENUM	1.4E+00		1	1
KM-6	S	10/15/2007	MOLYBDENUM	1.3E+00		1	1
KM-6	S	5/5/2008	MOLYBDENUM	1.2E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-7
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-64

Confidence in Trend:
99.6%

Coefficient of Variation:
0.15

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

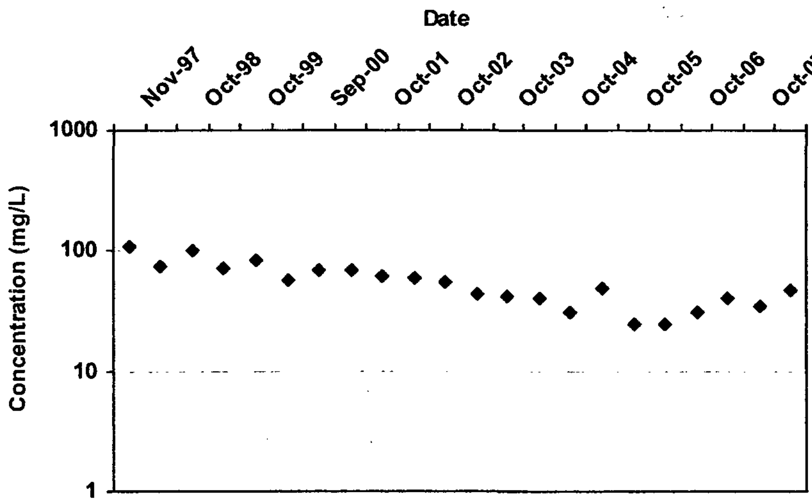
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-7	S	5/8/2000	MOLYBDENUM	5.8E-01		1	1
KM-7	S	9/25/2000	MOLYBDENUM	4.6E-01		1	1
KM-7	S	4/28/2001	MOLYBDENUM	4.4E-01		1	1
KM-7	S	10/26/2001	MOLYBDENUM	5.0E-01		1	1
KM-7	S	5/31/2002	MOLYBDENUM	4.3E-01		1	1
KM-7	S	10/18/2002	MOLYBDENUM	4.8E-01		1	1
KM-7	S	5/31/2003	MOLYBDENUM	4.0E-01		1	1
KM-7	S	10/23/2003	MOLYBDENUM	4.9E-01		1	1
KM-7	S	5/3/2004	MOLYBDENUM	4.9E-01		1	1
KM-7	S	10/17/2004	MOLYBDENUM	5.3E-01		1	1
KM-7	S	5/3/2005	MOLYBDENUM	4.3E-01		1	1
KM-7	S	10/25/2005	MOLYBDENUM	4.5E-01		1	1
KM-7	S	5/16/2006	MOLYBDENUM	4.3E-01		1	1
KM-7	S	10/23/2006	MOLYBDENUM	3.9E-01		1	1
KM-7	S	5/14/2007	MOLYBDENUM	3.0E-01		1	1
KM-7	S	10/15/2007	MOLYBDENUM	4.0E-01		1	1
KM-7	S	5/5/2008	MOLYBDENUM	3.9E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-8
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 to 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -167

Confidence in Trend: 100.0%

Coefficient of Variation: 0.42

Mann Kendall Concentration Trend: (See Note) D

Data Table:

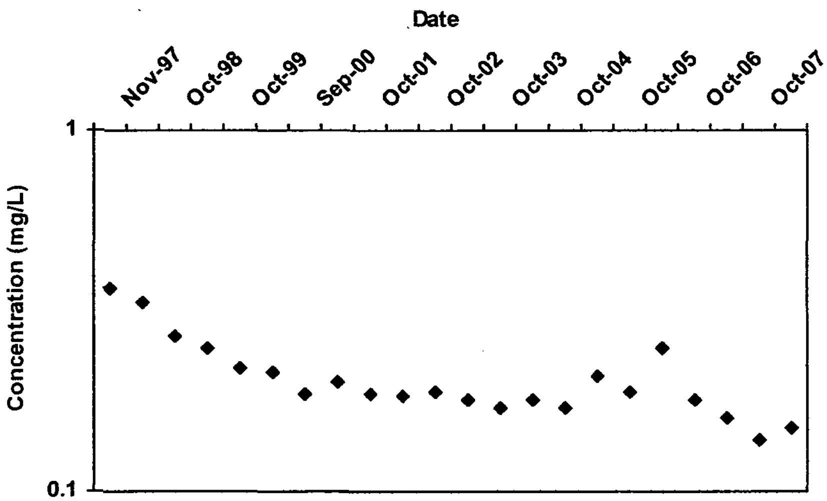
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-8	S	11/20/1997	MOLYBDENUM	1.1E+02		1	1
KM-8	S	5/5/1998	MOLYBDENUM	7.4E+01		1	1
KM-8	S	10/27/1998	MOLYBDENUM	1.0E+02		1	1
KM-8	S	5/4/1999	MOLYBDENUM	7.1E+01		1	1
KM-8	S	10/5/1999	MOLYBDENUM	8.4E+01		1	1
KM-8	S	5/8/2000	MOLYBDENUM	5.8E+01		1	1
KM-8	S	9/25/2000	MOLYBDENUM	7.0E+01		1	1
KM-8	S	4/28/2001	MOLYBDENUM	7.0E+01		1	1
KM-8	S	10/26/2001	MOLYBDENUM	6.2E+01		1	1
KM-8	S	5/31/2002	MOLYBDENUM	5.8E+01		1	1
KM-8	S	10/18/2002	MOLYBDENUM	5.5E+01		1	1
KM-8	S	5/31/2003	MOLYBDENUM	4.4E+01		1	1
KM-8	S	10/23/2003	MOLYBDENUM	4.2E+01		1	1
KM-8	S	5/3/2004	MOLYBDENUM	4.0E+01		1	1
KM-8	S	10/17/2004	MOLYBDENUM	3.1E+01		1	1
KM-8	S	5/3/2005	MOLYBDENUM	4.9E+01		1	1
KM-8	S	10/25/2005	MOLYBDENUM	2.5E+01		1	1
KM-8	S	5/16/2006	MOLYBDENUM	2.5E+01		1	1
KM-8	S	10/23/2006	MOLYBDENUM	3.1E+01		1	1
KM-8	S	5/14/2007	MOLYBDENUM	4.1E+01		1	1
KM-8	S	10/15/2007	MOLYBDENUM	3.5E+01		1	1
KM-8	S	5/5/2008	MOLYBDENUM	4.7E+01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-9
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-149

Confidence in Trend:
100.0%

Coefficient of Variation:
0.27

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

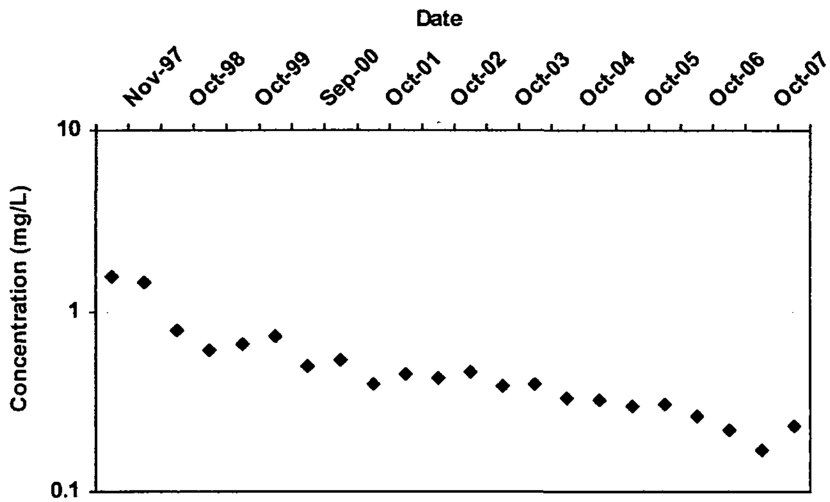
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-9	S	11/20/1997	MOLYBDENUM	3.6E-01		1	1
KM-9	S	5/5/1998	MOLYBDENUM	3.4E-01		1	1
KM-9	S	10/27/1998	MOLYBDENUM	2.7E-01		1	1
KM-9	S	5/4/1999	MOLYBDENUM	2.5E-01		1	1
KM-9	S	10/5/1999	MOLYBDENUM	2.2E-01		1	1
KM-9	S	5/8/2000	MOLYBDENUM	2.1E-01		1	1
KM-9	S	9/25/2000	MOLYBDENUM	1.9E-01		1	1
KM-9	S	4/28/2001	MOLYBDENUM	2.0E-01		1	1
KM-9	S	10/26/2001	MOLYBDENUM	1.9E-01		1	1
KM-9	S	5/31/2002	MOLYBDENUM	1.8E-01		1	1
KM-9	S	10/18/2002	MOLYBDENUM	1.9E-01		1	1
KM-9	S	5/31/2003	MOLYBDENUM	1.8E-01		1	1
KM-9	S	10/23/2003	MOLYBDENUM	1.7E-01		1	1
KM-9	S	5/3/2004	MOLYBDENUM	1.8E-01		1	1
KM-9	S	10/17/2004	MOLYBDENUM	1.7E-01		1	1
KM-9	S	5/3/2005	MOLYBDENUM	2.1E-01		1	1
KM-9	S	10/25/2005	MOLYBDENUM	1.9E-01		1	1
KM-9	S	5/16/2006	MOLYBDENUM	2.5E-01		1	1
KM-9	S	10/23/2006	MOLYBDENUM	1.8E-01		1	1
KM-9	S	5/14/2007	MOLYBDENUM	1.6E-01		1	1
KM-9	S	10/15/2007	MOLYBDENUM	1.4E-01		1	1
KM-9	S	5/5/2008	MOLYBDENUM	1.5E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-13
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:

-203

Confidence in Trend:

100.0%

Coefficient of Variation:

0.68

Mann Kendall Concentration Trend: (See Note)

D

Data Table:

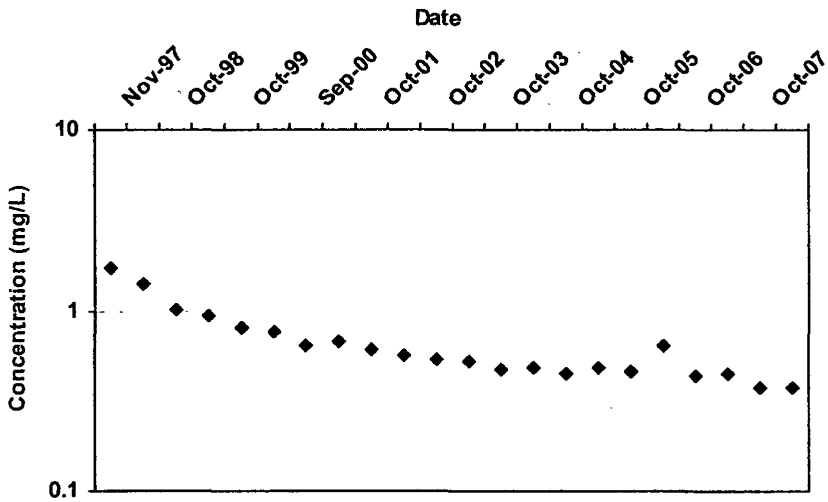
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-13	S	11/20/1997	MOLYBDENUM	1.6E+00		1	1
KM-13	S	5/5/1998	MOLYBDENUM	1.4E+00		1	1
KM-13	S	10/27/1998	MOLYBDENUM	7.8E-01		1	1
KM-13	S	5/4/1999	MOLYBDENUM	6.1E-01		1	1
KM-13	S	10/5/1999	MOLYBDENUM	6.5E-01		1	1
KM-13	S	5/8/2000	MOLYBDENUM	7.3E-01		1	1
KM-13	S	9/25/2000	MOLYBDENUM	5.0E-01		1	1
KM-13	S	4/28/2001	MOLYBDENUM	5.4E-01		1	1
KM-13	S	10/26/2001	MOLYBDENUM	4.0E-01		1	1
KM-13	S	5/31/2002	MOLYBDENUM	4.5E-01		1	1
KM-13	S	10/18/2002	MOLYBDENUM	4.3E-01		1	1
KM-13	S	5/31/2003	MOLYBDENUM	4.6E-01		1	1
KM-13	S	10/23/2003	MOLYBDENUM	3.9E-01		1	1
KM-13	S	5/3/2004	MOLYBDENUM	4.0E-01		1	1
KM-13	S	10/17/2004	MOLYBDENUM	3.3E-01		1	1
KM-13	S	5/3/2005	MOLYBDENUM	3.2E-01		1	1
KM-13	S	10/25/2005	MOLYBDENUM	3.0E-01		1	1
KM-13	S	5/16/2006	MOLYBDENUM	3.1E-01		1	1
KM-13	S	10/23/2006	MOLYBDENUM	2.6E-01		1	1
KM-13	S	5/14/2007	MOLYBDENUM	2.2E-01		1	1
KM-13	S	10/15/2007	MOLYBDENUM	1.7E-01		1	1
KM-13	S	5/5/2008	MOLYBDENUM	2.3E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-15
Well Type: T
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -196

Confidence in Trend: 100.0%

Coefficient of Variation: 0.51

Mann Kendall Concentration Trend: (See Note) D

Data Table:

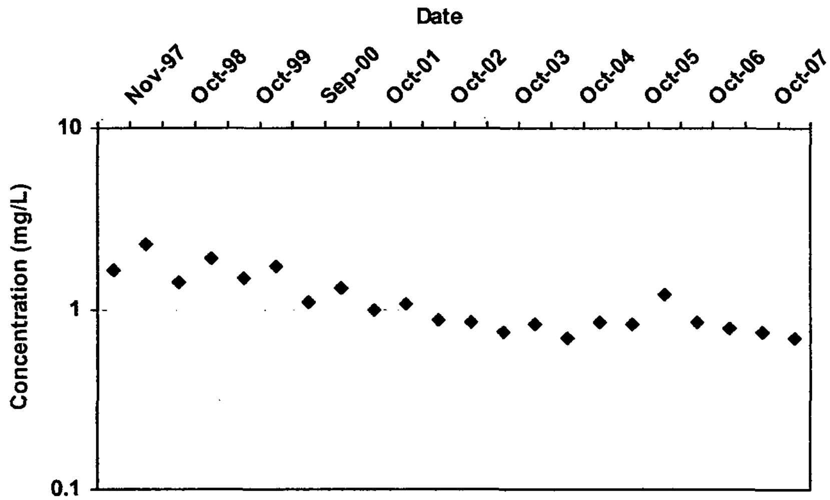
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-15	T	11/20/1997	MOLYBDENUM	1.7E+00		1	1
KM-15	T	5/5/1998	MOLYBDENUM	1.4E+00		1	1
KM-15	T	10/27/1998	MOLYBDENUM	1.0E+00		1	1
KM-15	T	5/4/1999	MOLYBDENUM	9.3E-01		1	1
KM-15	T	10/5/1999	MOLYBDENUM	8.1E-01		1	1
KM-15	T	5/8/2000	MOLYBDENUM	7.7E-01		1	1
KM-15	T	9/25/2000	MOLYBDENUM	6.4E-01		1	1
KM-15	T	4/28/2001	MOLYBDENUM	6.7E-01		1	1
KM-15	T	10/26/2001	MOLYBDENUM	6.1E-01		1	1
KM-15	T	5/31/2002	MOLYBDENUM	5.6E-01		1	1
KM-15	T	10/18/2002	MOLYBDENUM	5.3E-01		1	1
KM-15	T	5/31/2003	MOLYBDENUM	5.2E-01		1	1
KM-15	T	10/23/2003	MOLYBDENUM	4.7E-01		1	1
KM-15	T	5/3/2004	MOLYBDENUM	4.9E-01		1	1
KM-15	T	10/17/2004	MOLYBDENUM	4.5E-01		1	1
KM-15	T	5/3/2005	MOLYBDENUM	4.9E-01		1	1
KM-15	T	10/25/2005	MOLYBDENUM	4.6E-01		1	1
KM-15	T	5/16/2006	MOLYBDENUM	6.4E-01		1	1
KM-15	T	10/23/2006	MOLYBDENUM	4.4E-01		1	1
KM-15	T	5/14/2007	MOLYBDENUM	4.5E-01		1	1
KM-15	T	10/15/2007	MOLYBDENUM	3.8E-01		1	1
KM-15	T	5/5/2008	MOLYBDENUM	3.8E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-16
Well Type: T
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:

-158

Confidence in Trend:

100.0%

Coefficient of Variation:

0.39

Mann Kendall Concentration Trend: (See Note)

D

Data Table:

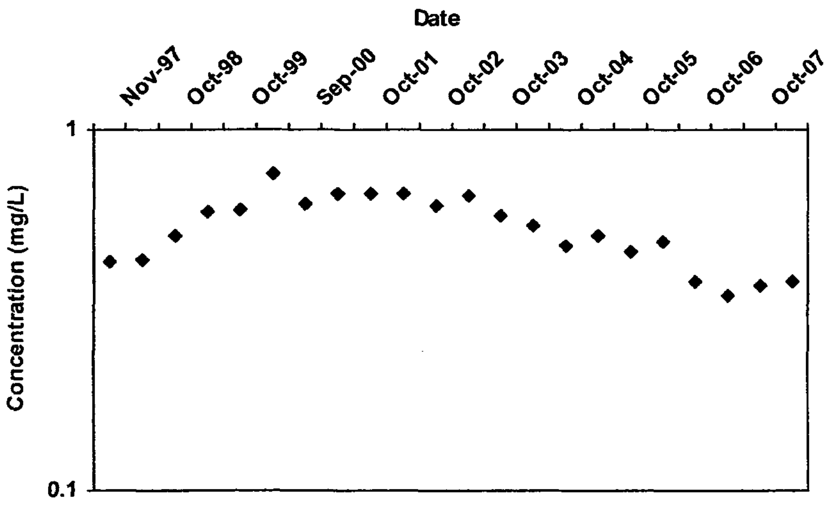
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-16	T	11/20/1997	MOLYBDENUM	1.6E+00		1	1
KM-16	T	5/5/1998	MOLYBDENUM	2.3E+00		1	1
KM-16	T	10/27/1998	MOLYBDENUM	1.4E+00		1	1
KM-16	T	5/4/1999	MOLYBDENUM	1.9E+00		1	1
KM-16	T	10/5/1999	MOLYBDENUM	1.5E+00		1	1
KM-16	T	5/8/2000	MOLYBDENUM	1.7E+00		1	1
KM-16	T	9/25/2000	MOLYBDENUM	1.1E+00		1	1
KM-16	T	4/28/2001	MOLYBDENUM	1.3E+00		1	1
KM-16	T	10/26/2001	MOLYBDENUM	1.0E+00		1	1
KM-16	T	5/31/2002	MOLYBDENUM	1.1E+00		1	1
KM-16	T	10/18/2002	MOLYBDENUM	8.8E-01		1	1
KM-16	T	5/31/2003	MOLYBDENUM	8.4E-01		1	1
KM-16	T	10/23/2003	MOLYBDENUM	7.4E-01		1	1
KM-16	T	5/3/2004	MOLYBDENUM	8.2E-01		1	1
KM-16	T	10/17/2004	MOLYBDENUM	7.0E-01		1	1
KM-16	T	5/3/2005	MOLYBDENUM	8.4E-01		1	1
KM-16	T	10/25/2005	MOLYBDENUM	8.2E-01		1	1
KM-16	T	5/16/2006	MOLYBDENUM	1.2E+00		1	1
KM-16	T	10/23/2006	MOLYBDENUM	8.5E-01		1	1
KM-16	T	5/14/2007	MOLYBDENUM	7.8E-01		1	1
KM-16	T	10/15/2007	MOLYBDENUM	7.5E-01		1	1
KM-16	T	5/5/2008	MOLYBDENUM	7.0E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-17
Well Type: T
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -85

Confidence in Trend: 99.2%

Coefficient of Variation: 0.22

Mann Kendall Concentration Trend: (See Note) D

Data Table:

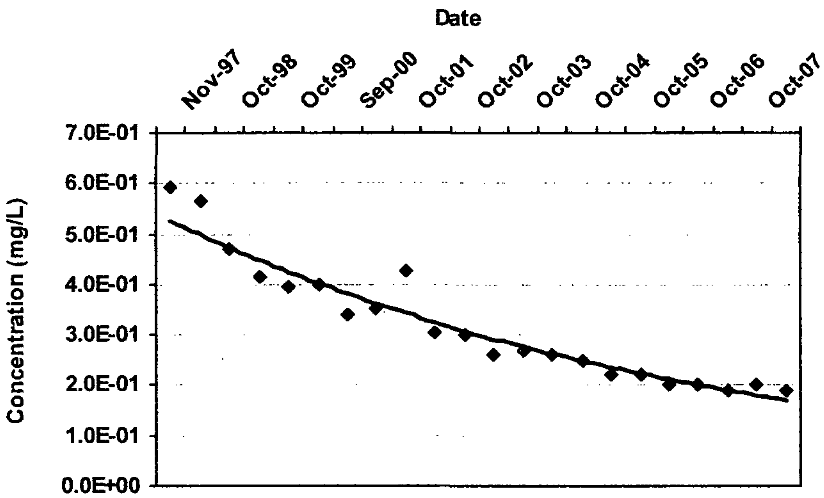
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-17	T	11/20/1997	MOLYBDENUM	4.3E-01		1	1
KM-17	T	5/5/1998	MOLYBDENUM	4.4E-01		1	1
KM-17	T	10/27/1998	MOLYBDENUM	5.1E-01		1	1
KM-17	T	5/4/1999	MOLYBDENUM	5.9E-01		1	1
KM-17	T	10/5/1999	MOLYBDENUM	6.1E-01		1	1
KM-17	T	5/8/2000	MOLYBDENUM	7.5E-01		1	1
KM-17	T	9/25/2000	MOLYBDENUM	6.3E-01		1	1
KM-17	T	4/28/2001	MOLYBDENUM	6.7E-01		1	1
KM-17	T	10/26/2001	MOLYBDENUM	6.6E-01		1	1
KM-17	T	5/31/2002	MOLYBDENUM	6.7E-01		1	1
KM-17	T	10/18/2002	MOLYBDENUM	6.2E-01		1	1
KM-17	T	5/31/2003	MOLYBDENUM	6.6E-01		1	1
KM-17	T	10/23/2003	MOLYBDENUM	5.8E-01		1	1
KM-17	T	5/3/2004	MOLYBDENUM	5.4E-01		1	1
KM-17	T	10/17/2004	MOLYBDENUM	4.8E-01		1	1
KM-17	T	5/3/2005	MOLYBDENUM	5.1E-01		1	1
KM-17	T	10/25/2005	MOLYBDENUM	4.6E-01		1	1
KM-17	T	5/16/2006	MOLYBDENUM	4.9E-01		1	1
KM-17	T	10/23/2006	MOLYBDENUM	3.8E-01		1	1
KM-17	T	5/14/2007	MOLYBDENUM	3.5E-01		1	1
KM-17	T	10/15/2007	MOLYBDENUM	3.7E-01		1	1
KM-17	T	5/5/2008	MOLYBDENUM	3.8E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Linear Regression Statistics

Well: Finch Spring
Well Type: T
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.38

Confidence in Trend: 100.0%

Ln Slope: -2.9E-04

LR Concentration Trend: D

Consolidation Data Table:

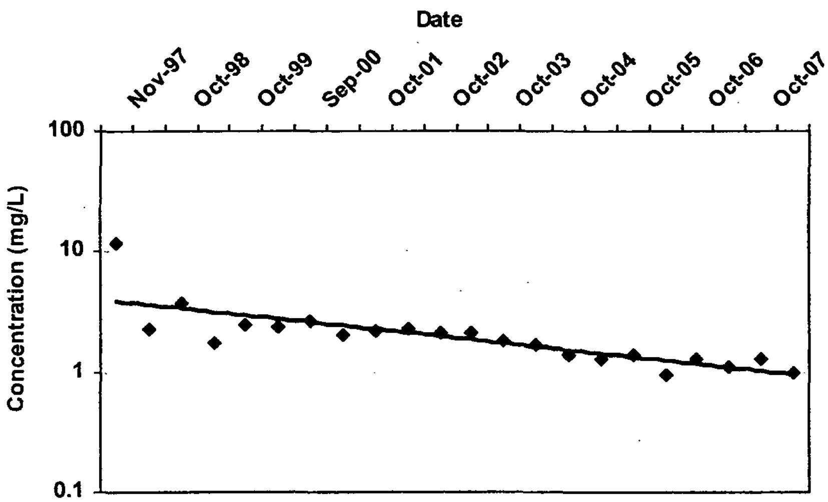
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
Finch Spring	T	11/20/1997	MOLYBDENUM	5.9E-01		1	1
Finch Spring	T	5/5/1998	MOLYBDENUM	5.6E-01		1	1
Finch Spring	T	10/27/1998	MOLYBDENUM	4.7E-01		1	1
Finch Spring	T	5/4/1999	MOLYBDENUM	4.2E-01		1	1
Finch Spring	T	10/5/1999	MOLYBDENUM	4.0E-01		1	1
Finch Spring	T	5/8/2000	MOLYBDENUM	4.0E-01		1	1
Finch Spring	T	9/25/2000	MOLYBDENUM	3.4E-01		1	1
Finch Spring	T	4/27/2001	MOLYBDENUM	3.5E-01		1	1
Finch Spring	T	10/26/2001	MOLYBDENUM	4.3E-01		1	1
Finch Spring	T	5/31/2002	MOLYBDENUM	3.1E-01		1	1
Finch Spring	T	10/18/2002	MOLYBDENUM	3.0E-01		1	1
Finch Spring	T	5/31/2003	MOLYBDENUM	2.6E-01		1	1
Finch Spring	T	10/23/2003	MOLYBDENUM	2.7E-01		1	1
Finch Spring	T	5/3/2004	MOLYBDENUM	2.6E-01		1	1
Finch Spring	T	10/13/2004	MOLYBDENUM	2.5E-01		1	1
Finch Spring	T	5/3/2005	MOLYBDENUM	2.2E-01		1	1
Finch Spring	T	10/25/2005	MOLYBDENUM	2.2E-01		1	1
Finch Spring	T	5/15/2006	MOLYBDENUM	2.0E-01		1	1
Finch Spring	T	10/23/2006	MOLYBDENUM	2.0E-01		1	1
Finch Spring	T	5/14/2007	MOLYBDENUM	1.9E-01		1	1
Finch Spring	T	10/15/2007	MOLYBDENUM	2.0E-01		1	1
Finch Spring	T	5/5/2008	MOLYBDENUM	1.9E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-2
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.95

Confidence in Trend: 100.0%

Ln Slope: -3.6E-04

LR Concentration Trend: D

Consolidation Data Table:

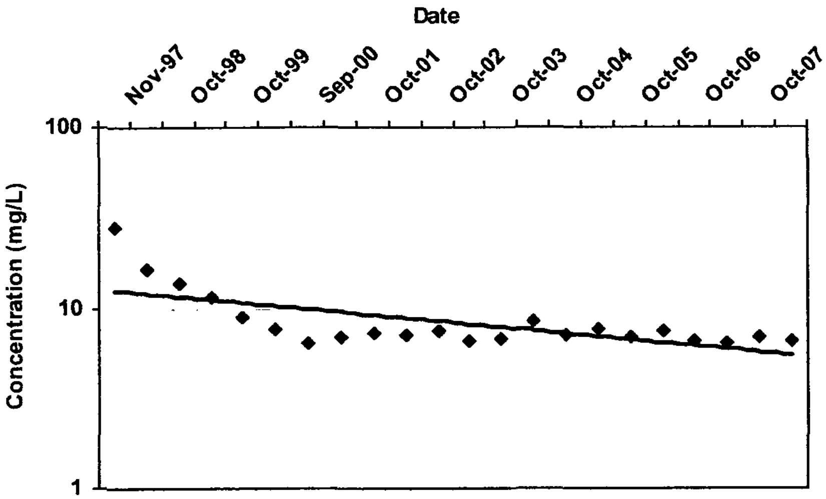
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-2	S	11/20/1997	MOLYBDENUM	1.2E+01		1	1
KM-2	S	5/5/1998	MOLYBDENUM	2.3E+00		1	1
KM-2	S	10/27/1998	MOLYBDENUM	3.8E+00		1	1
KM-2	S	5/4/1999	MOLYBDENUM	1.8E+00		1	1
KM-2	S	10/5/1999	MOLYBDENUM	2.5E+00		1	1
KM-2	S	5/8/2000	MOLYBDENUM	2.4E+00		1	1
KM-2	S	9/25/2000	MOLYBDENUM	2.7E+00		1	1
KM-2	S	4/28/2001	MOLYBDENUM	2.1E+00		1	1
KM-2	S	10/26/2001	MOLYBDENUM	2.2E+00		1	1
KM-2	S	5/31/2002	MOLYBDENUM	2.3E+00		1	1
KM-2	S	10/18/2002	MOLYBDENUM	2.1E+00		1	1
KM-2	S	5/31/2003	MOLYBDENUM	2.1E+00		1	1
KM-2	S	10/23/2003	MOLYBDENUM	1.8E+00		1	1
KM-2	S	5/3/2004	MOLYBDENUM	1.7E+00		1	1
KM-2	S	10/17/2004	MOLYBDENUM	1.4E+00		1	1
KM-2	S	5/3/2005	MOLYBDENUM	1.3E+00		1	1
KM-2	S	10/25/2005	MOLYBDENUM	1.4E+00		1	1
KM-2	S	5/16/2006	MOLYBDENUM	9.6E-01		1	1
KM-2	S	10/23/2006	MOLYBDENUM	1.3E+00		1	1
KM-2	S	5/14/2007	MOLYBDENUM	1.1E+00		1	1
KM-2	S	10/15/2007	MOLYBDENUM	1.3E+00		1	1
KM-2	S	5/5/2008	MOLYBDENUM	1.0E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-3
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.55

Confidence in Trend: 100.0%

Ln Slope: -2.1E-04

LR Concentration Trend: D

Consolidation Data Table:

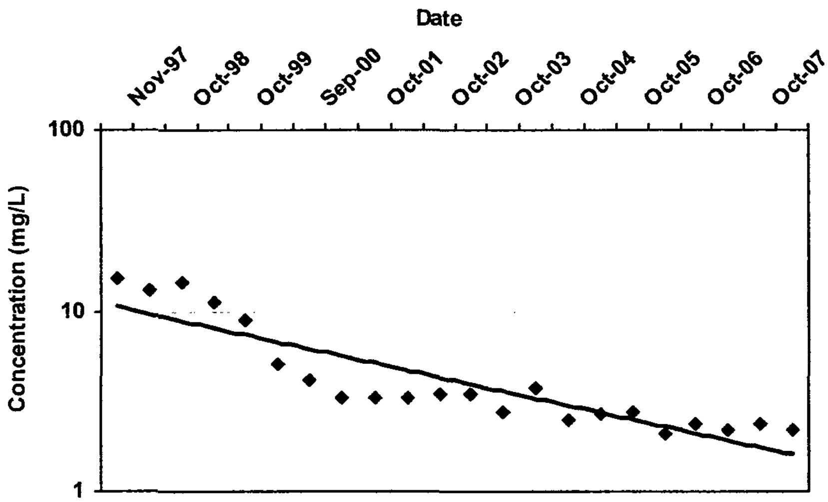
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-3	S	11/20/1997	MOLYBDENUM	2.8E+01		1	1
KM-3	S	5/5/1998	MOLYBDENUM	1.6E+01		1	1
KM-3	S	10/27/1998	MOLYBDENUM	1.4E+01		1	1
KM-3	S	5/4/1999	MOLYBDENUM	1.1E+01		1	1
KM-3	S	10/5/1999	MOLYBDENUM	8.8E+00		1	1
KM-3	S	5/8/2000	MOLYBDENUM	7.6E+00		1	1
KM-3	S	9/25/2000	MOLYBDENUM	6.4E+00		1	1
KM-3	S	4/28/2001	MOLYBDENUM	6.9E+00		1	1
KM-3	S	10/26/2001	MOLYBDENUM	7.4E+00		1	1
KM-3	S	5/31/2002	MOLYBDENUM	7.1E+00		1	1
KM-3	S	10/18/2002	MOLYBDENUM	7.5E+00		1	1
KM-3	S	5/31/2003	MOLYBDENUM	6.6E+00		1	1
KM-3	S	10/23/2003	MOLYBDENUM	6.8E+00		1	1
KM-3	S	5/3/2004	MOLYBDENUM	8.4E+00		1	1
KM-3	S	10/17/2004	MOLYBDENUM	7.1E+00		1	1
KM-3	S	5/3/2005	MOLYBDENUM	7.7E+00		1	1
KM-3	S	10/25/2005	MOLYBDENUM	6.9E+00		1	1
KM-3	S	5/16/2006	MOLYBDENUM	7.4E+00		1	1
KM-3	S	10/23/2006	MOLYBDENUM	6.6E+00		1	1
KM-3	S	5/14/2007	MOLYBDENUM	6.4E+00		1	1
KM-3	S	10/15/2007	MOLYBDENUM	6.9E+00		1	1
KM-3	S	5/5/2008	MOLYBDENUM	6.5E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-4
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.82

Confidence in Trend: 100.0%

Ln Slope: -4.9E-04

LR Concentration Trend: D

Consolidation Data Table:

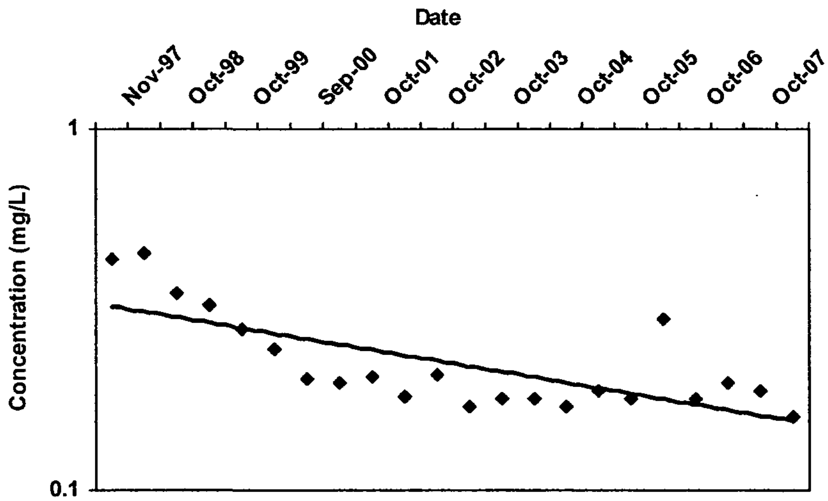
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-4	S	11/20/1997	MOLYBDENUM	1.5E+01		1	1
KM-4	S	5/5/1998	MOLYBDENUM	1.3E+01		1	1
KM-4	S	10/27/1998	MOLYBDENUM	1.4E+01		1	1
KM-4	S	5/4/1999	MOLYBDENUM	1.1E+01		1	1
KM-4	S	10/5/1999	MOLYBDENUM	9.0E+00		1	1
KM-4	S	5/8/2000	MOLYBDENUM	5.1E+00		1	1
KM-4	S	9/25/2000	MOLYBDENUM	4.1E+00		1	1
KM-4	S	4/28/2001	MOLYBDENUM	3.3E+00		1	1
KM-4	S	10/26/2001	MOLYBDENUM	3.3E+00		1	1
KM-4	S	5/31/2002	MOLYBDENUM	3.3E+00		1	1
KM-4	S	10/18/2002	MOLYBDENUM	3.5E+00		1	1
KM-4	S	5/31/2003	MOLYBDENUM	3.5E+00		1	1
KM-4	S	10/23/2003	MOLYBDENUM	2.8E+00		1	1
KM-4	S	5/3/2004	MOLYBDENUM	3.8E+00		1	1
KM-4	S	10/17/2004	MOLYBDENUM	2.5E+00		1	1
KM-4	S	5/3/2005	MOLYBDENUM	2.7E+00		1	1
KM-4	S	10/25/2005	MOLYBDENUM	2.8E+00		1	1
KM-4	S	5/16/2006	MOLYBDENUM	2.1E+00		1	1
KM-4	S	10/23/2006	MOLYBDENUM	2.4E+00		1	1
KM-4	S	5/14/2007	MOLYBDENUM	2.2E+00		1	1
KM-4	S	10/15/2007	MOLYBDENUM	2.4E+00		1	1
KM-4	S	5/5/2008	MOLYBDENUM	2.2E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-5
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.36

Confidence in Trend: 100.0%

Ln Slope: -1.9E-04

LR Concentration Trend: D

Consolidation Data Table:

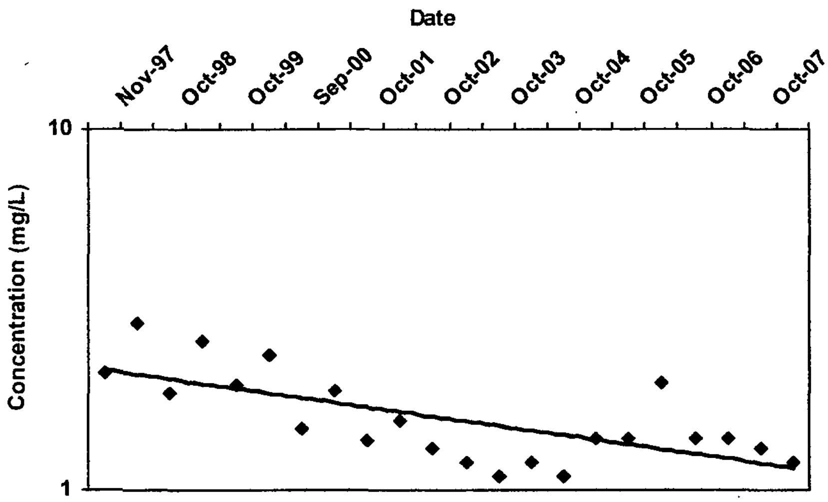
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-5	S	11/20/1997	MOLYBDENUM	4.4E-01		1	1
KM-5	S	5/5/1998	MOLYBDENUM	4.5E-01		1	1
KM-5	S	10/27/1998	MOLYBDENUM	3.5E-01		1	1
KM-5	S	5/4/1999	MOLYBDENUM	3.3E-01		1	1
KM-5	S	10/5/1999	MOLYBDENUM	2.8E-01		1	1
KM-5	S	5/8/2000	MOLYBDENUM	2.5E-01		1	1
KM-5	S	9/25/2000	MOLYBDENUM	2.1E-01		1	1
KM-5	S	4/28/2001	MOLYBDENUM	2.0E-01		1	1
KM-5	S	10/26/2001	MOLYBDENUM	2.1E-01		1	1
KM-5	S	5/31/2002	MOLYBDENUM	1.8E-01		1	1
KM-5	S	10/18/2002	MOLYBDENUM	2.1E-01		1	1
KM-5	S	5/31/2003	MOLYBDENUM	1.7E-01		1	1
KM-5	S	10/23/2003	MOLYBDENUM	1.8E-01		1	1
KM-5	S	5/3/2004	MOLYBDENUM	1.8E-01		1	1
KM-5	S	10/17/2004	MOLYBDENUM	1.7E-01		1	1
KM-5	S	5/3/2005	MOLYBDENUM	1.9E-01		1	1
KM-5	S	10/25/2005	MOLYBDENUM	1.8E-01		1	1
KM-5	S	5/16/2006	MOLYBDENUM	3.0E-01		1	1
KM-5	S	10/23/2006	MOLYBDENUM	1.8E-01		1	1
KM-5	S	5/14/2007	MOLYBDENUM	2.0E-01		1	1
KM-5	S	10/15/2007	MOLYBDENUM	1.9E-01		1	1
KM-5	S	5/5/2008	MOLYBDENUM	1.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-6
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.31

Confidence in Trend: 100.0%

Ln Slope: -1.6E-04

LR Concentration Trend: D

Consolidation Data Table:

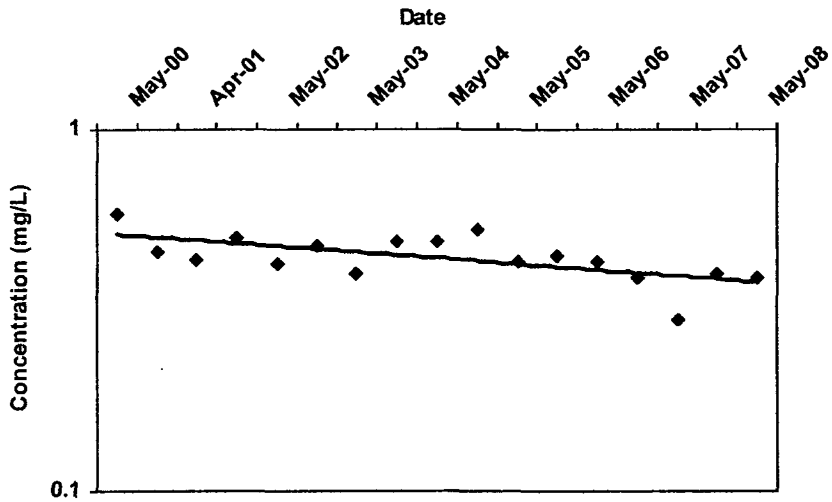
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-6	S	11/20/1997	MOLYBDENUM	2.1E+00		1	1
KM-6	S	5/5/1998	MOLYBDENUM	2.9E+00		1	1
KM-6	S	10/27/1998	MOLYBDENUM	1.9E+00		1	1
KM-6	S	5/4/1999	MOLYBDENUM	2.6E+00		1	1
KM-6	S	10/5/1999	MOLYBDENUM	2.0E+00		1	1
KM-6	S	5/8/2000	MOLYBDENUM	2.4E+00		1	1
KM-6	S	9/25/2000	MOLYBDENUM	1.5E+00		1	1
KM-6	S	4/28/2001	MOLYBDENUM	1.9E+00		1	1
KM-6	S	10/26/2001	MOLYBDENUM	1.4E+00		1	1
KM-6	S	5/31/2002	MOLYBDENUM	1.6E+00		1	1
KM-6	S	10/18/2002	MOLYBDENUM	1.3E+00		1	1
KM-6	S	5/31/2003	MOLYBDENUM	1.2E+00		1	1
KM-6	S	10/23/2003	MOLYBDENUM	1.1E+00		1	1
KM-6	S	5/3/2004	MOLYBDENUM	1.2E+00		1	1
KM-6	S	10/17/2004	MOLYBDENUM	1.1E+00		1	1
KM-6	S	5/3/2005	MOLYBDENUM	1.4E+00		1	1
KM-6	S	10/25/2005	MOLYBDENUM	1.4E+00		1	1
KM-6	S	5/16/2006	MOLYBDENUM	2.0E+00		1	1
KM-6	S	10/23/2006	MOLYBDENUM	1.4E+00		1	1
KM-6	S	5/14/2007	MOLYBDENUM	1.4E+00		1	1
KM-6	S	10/15/2007	MOLYBDENUM	1.3E+00		1	1
KM-6	S	5/5/2008	MOLYBDENUM	1.2E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-7
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : *Actual Value*



COV: 0.15

Confidence in Trend: 99.7%

Ln Slope: -1.0E-04

LR Concentration Trend: D

Consolidation Data Table:

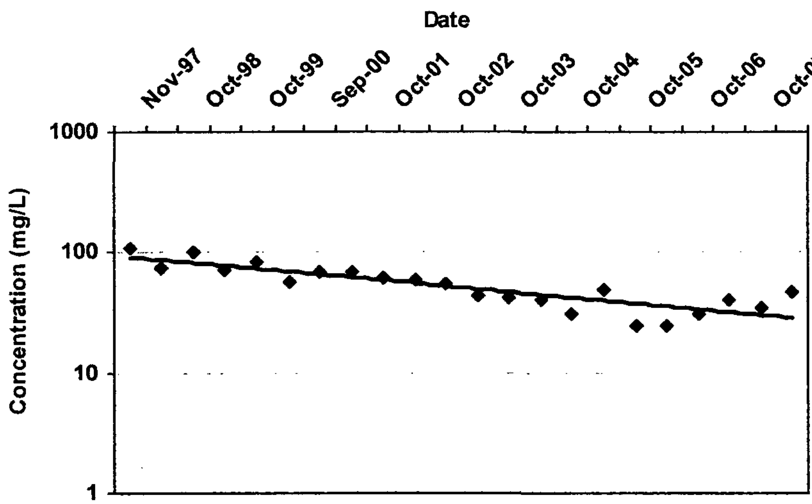
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-7	S	5/8/2000	MOLYBDENUM	5.8E-01		1	1
KM-7	S	9/25/2000	MOLYBDENUM	4.6E-01		1	1
KM-7	S	4/28/2001	MOLYBDENUM	4.4E-01		1	1
KM-7	S	10/26/2001	MOLYBDENUM	5.0E-01		1	1
KM-7	S	5/31/2002	MOLYBDENUM	4.3E-01		1	1
KM-7	S	10/18/2002	MOLYBDENUM	4.8E-01		1	1
KM-7	S	5/31/2003	MOLYBDENUM	4.0E-01		1	1
KM-7	S	10/23/2003	MOLYBDENUM	4.9E-01		1	1
KM-7	S	5/3/2004	MOLYBDENUM	4.9E-01		1	1
KM-7	S	10/17/2004	MOLYBDENUM	5.3E-01		1	1
KM-7	S	5/3/2005	MOLYBDENUM	4.3E-01		1	1
KM-7	S	10/25/2005	MOLYBDENUM	4.5E-01		1	1
KM-7	S	5/16/2006	MOLYBDENUM	4.3E-01		1	1
KM-7	S	10/23/2006	MOLYBDENUM	3.9E-01		1	1
KM-7	S	5/14/2007	MOLYBDENUM	3.0E-01		1	1
KM-7	S	10/15/2007	MOLYBDENUM	4.0E-01		1	1
KM-7	S	5/5/2008	MOLYBDENUM	3.9E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-8
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.42

Confidence in Trend: 100.0%

Ln Slope: -3.0E-04

LR Concentration Trend: D

Consolidation Data Table:

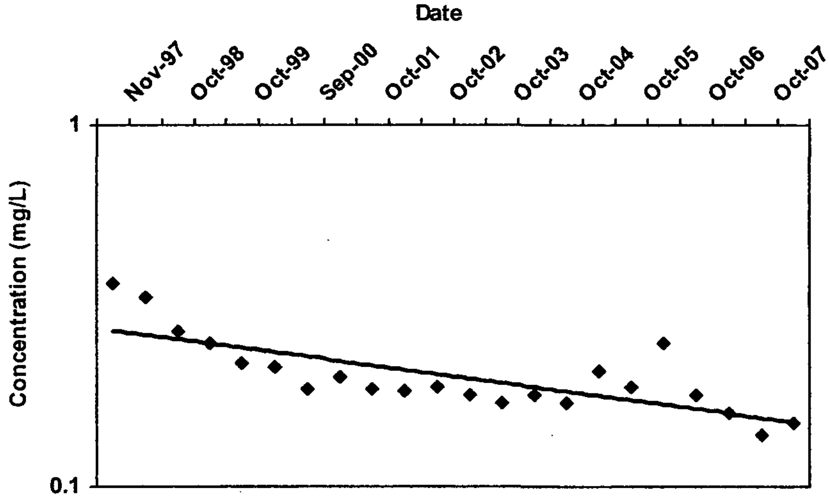
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-8	S	11/20/1997	MOLYBDENUM	1.1E+02		1	1
KM-8	S	5/5/1998	MOLYBDENUM	7.4E+01		1	1
KM-8	S	10/27/1998	MOLYBDENUM	1.0E+02		1	1
KM-8	S	5/4/1999	MOLYBDENUM	7.1E+01		1	1
KM-8	S	10/5/1999	MOLYBDENUM	8.4E+01		1	1
KM-8	S	5/8/2000	MOLYBDENUM	5.8E+01		1	1
KM-8	S	9/25/2000	MOLYBDENUM	7.0E+01		1	1
KM-8	S	4/28/2001	MOLYBDENUM	7.0E+01		1	1
KM-8	S	10/26/2001	MOLYBDENUM	6.2E+01		1	1
KM-8	S	5/31/2002	MOLYBDENUM	5.8E+01		1	1
KM-8	S	10/18/2002	MOLYBDENUM	5.5E+01		1	1
KM-8	S	5/31/2003	MOLYBDENUM	4.4E+01		1	1
KM-8	S	10/23/2003	MOLYBDENUM	4.2E+01		1	1
KM-8	S	5/3/2004	MOLYBDENUM	4.0E+01		1	1
KM-8	S	10/17/2004	MOLYBDENUM	3.1E+01		1	1
KM-8	S	5/3/2005	MOLYBDENUM	4.9E+01		1	1
KM-8	S	10/25/2005	MOLYBDENUM	2.5E+01		1	1
KM-8	S	5/16/2006	MOLYBDENUM	2.5E+01		1	1
KM-8	S	10/23/2006	MOLYBDENUM	3.1E+01		1	1
KM-8	S	5/14/2007	MOLYBDENUM	4.1E+01		1	1
KM-8	S	10/15/2007	MOLYBDENUM	3.5E+01		1	1
KM-8	S	5/5/2008	MOLYBDENUM	4.7E+01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-9
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.27

Confidence in Trend: 100.0%

Ln Slope: -1.5E-04

LR Concentration Trend: D

Consolidation Data Table:

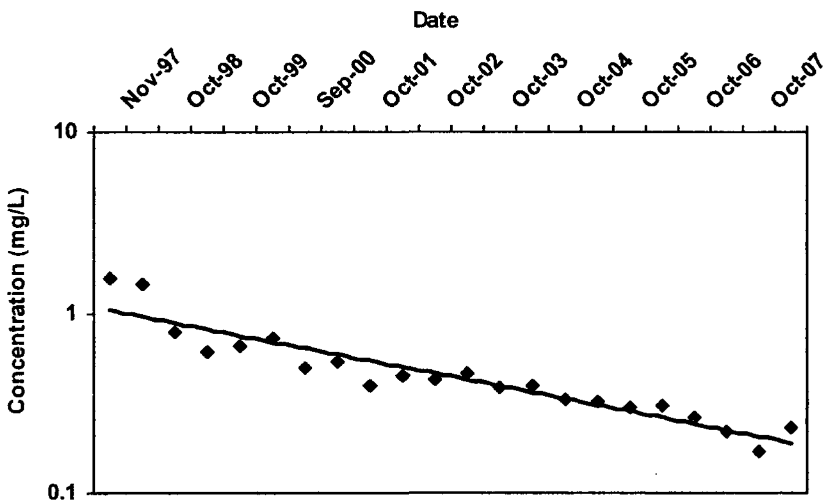
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-9	S	11/20/1997	MOLYBDENUM	3.6E-01		1	1
KM-9	S	5/5/1998	MOLYBDENUM	3.4E-01		1	1
KM-9	S	10/27/1998	MOLYBDENUM	2.7E-01		1	1
KM-9	S	5/4/1999	MOLYBDENUM	2.5E-01		1	1
KM-9	S	10/5/1999	MOLYBDENUM	2.2E-01		1	1
KM-9	S	5/8/2000	MOLYBDENUM	2.1E-01		1	1
KM-9	S	9/25/2000	MOLYBDENUM	1.9E-01		1	1
KM-9	S	4/28/2001	MOLYBDENUM	2.0E-01		1	1
KM-9	S	10/26/2001	MOLYBDENUM	1.9E-01		1	1
KM-9	S	5/31/2002	MOLYBDENUM	1.8E-01		1	1
KM-9	S	10/18/2002	MOLYBDENUM	1.9E-01		1	1
KM-9	S	5/31/2003	MOLYBDENUM	1.8E-01		1	1
KM-9	S	10/23/2003	MOLYBDENUM	1.7E-01		1	1
KM-9	S	5/3/2004	MOLYBDENUM	1.8E-01		1	1
KM-9	S	10/17/2004	MOLYBDENUM	1.7E-01		1	1
KM-9	S	5/3/2005	MOLYBDENUM	2.1E-01		1	1
KM-9	S	10/25/2005	MOLYBDENUM	1.9E-01		1	1
KM-9	S	5/16/2006	MOLYBDENUM	2.5E-01		1	1
KM-9	S	10/23/2006	MOLYBDENUM	1.8E-01		1	1
KM-9	S	5/14/2007	MOLYBDENUM	1.6E-01		1	1
KM-9	S	10/15/2007	MOLYBDENUM	1.4E-01		1	1
KM-9	S	5/5/2008	MOLYBDENUM	1.5E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-13
Well Type: S
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.68

Confidence in Trend: 100.0%

Ln Slope: -4.4E-04

LR Concentration Trend: D

Consolidation Data Table:

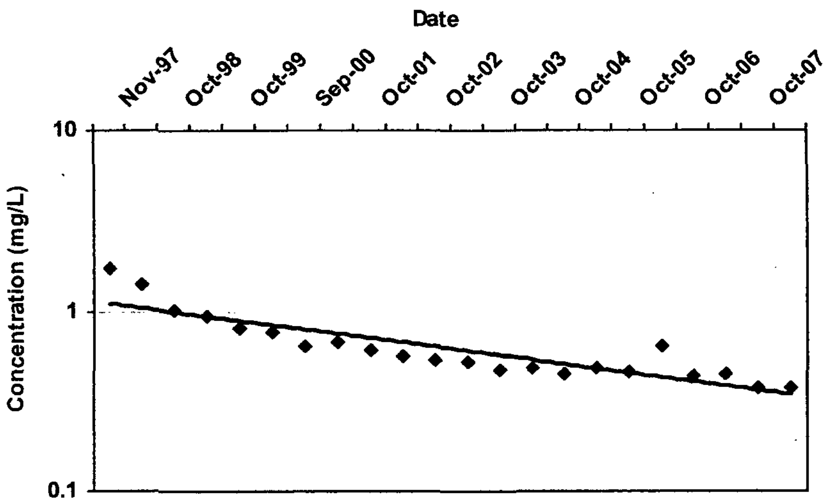
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-13	S	11/20/1997	MOLYBDENUM	1.6E+00		1	1
KM-13	S	5/5/1998	MOLYBDENUM	1.4E+00		1	1
KM-13	S	10/27/1998	MOLYBDENUM	7.8E-01		1	1
KM-13	S	5/4/1999	MOLYBDENUM	6.1E-01		1	1
KM-13	S	10/5/1999	MOLYBDENUM	6.5E-01		1	1
KM-13	S	5/8/2000	MOLYBDENUM	7.3E-01		1	1
KM-13	S	9/25/2000	MOLYBDENUM	5.0E-01		1	1
KM-13	S	4/28/2001	MOLYBDENUM	5.4E-01		1	1
KM-13	S	10/26/2001	MOLYBDENUM	4.0E-01		1	1
KM-13	S	5/31/2002	MOLYBDENUM	4.5E-01		1	1
KM-13	S	10/18/2002	MOLYBDENUM	4.3E-01		1	1
KM-13	S	5/31/2003	MOLYBDENUM	4.6E-01		1	1
KM-13	S	10/23/2003	MOLYBDENUM	3.9E-01		1	1
KM-13	S	5/3/2004	MOLYBDENUM	4.0E-01		1	1
KM-13	S	10/17/2004	MOLYBDENUM	3.3E-01		1	1
KM-13	S	5/3/2005	MOLYBDENUM	3.2E-01		1	1
KM-13	S	10/25/2005	MOLYBDENUM	3.0E-01		1	1
KM-13	S	5/16/2006	MOLYBDENUM	3.1E-01		1	1
KM-13	S	10/23/2006	MOLYBDENUM	2.6E-01		1	1
KM-13	S	5/14/2007	MOLYBDENUM	2.2E-01		1	1
KM-13	S	10/15/2007	MOLYBDENUM	1.7E-01		1	1
KM-13	S	5/5/2008	MOLYBDENUM	2.3E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-15
Well Type: T
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.51

Confidence in Trend: 100.0%

Ln Slope: -3.0E-04

LR Concentration Trend: D

Consolidation Data Table:

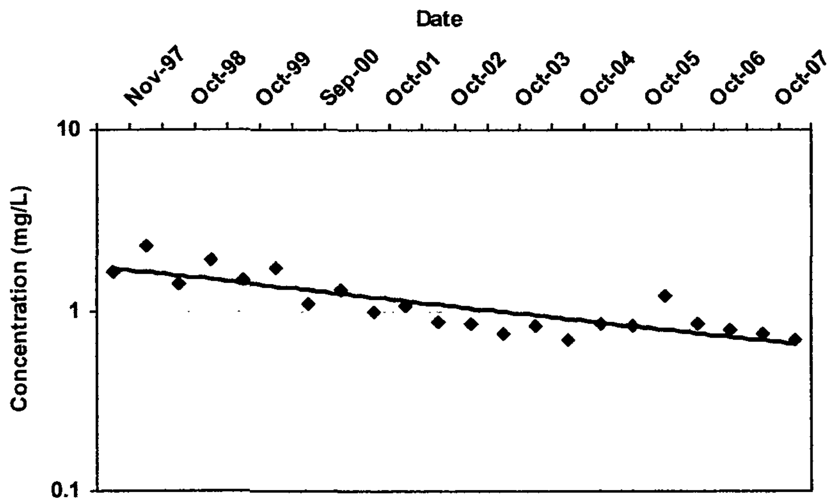
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-15	T	11/20/1997	MOLYBDENUM	1.7E+00		1	1
KM-15	T	5/5/1998	MOLYBDENUM	1.4E+00		1	1
KM-15	T	10/27/1998	MOLYBDENUM	1.0E+00		1	1
KM-15	T	5/4/1999	MOLYBDENUM	9.3E-01		1	1
KM-15	T	10/5/1999	MOLYBDENUM	8.1E-01		1	1
KM-15	T	5/8/2000	MOLYBDENUM	7.7E-01		1	1
KM-15	T	9/25/2000	MOLYBDENUM	6.4E-01		1	1
KM-15	T	4/28/2001	MOLYBDENUM	6.7E-01		1	1
KM-15	T	10/26/2001	MOLYBDENUM	6.1E-01		1	1
KM-15	T	5/31/2002	MOLYBDENUM	5.6E-01		1	1
KM-15	T	10/18/2002	MOLYBDENUM	5.3E-01		1	1
KM-15	T	5/31/2003	MOLYBDENUM	5.2E-01		1	1
KM-15	T	10/23/2003	MOLYBDENUM	4.7E-01		1	1
KM-15	T	5/3/2004	MOLYBDENUM	4.9E-01		1	1
KM-15	T	10/17/2004	MOLYBDENUM	4.5E-01		1	1
KM-15	T	5/3/2005	MOLYBDENUM	4.9E-01		1	1
KM-15	T	10/25/2005	MOLYBDENUM	4.6E-01		1	1
KM-15	T	5/16/2006	MOLYBDENUM	6.4E-01		1	1
KM-15	T	10/23/2006	MOLYBDENUM	4.4E-01		1	1
KM-15	T	5/14/2007	MOLYBDENUM	4.5E-01		1	1
KM-15	T	10/15/2007	MOLYBDENUM	3.8E-01		1	1
KM-15	T	5/5/2008	MOLYBDENUM	3.8E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-16
Well Type: T
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.39

Confidence in Trend: 100.0%

Ln Slope: -2.5E-04

LR Concentration Trend: D

Consolidation Data Table:

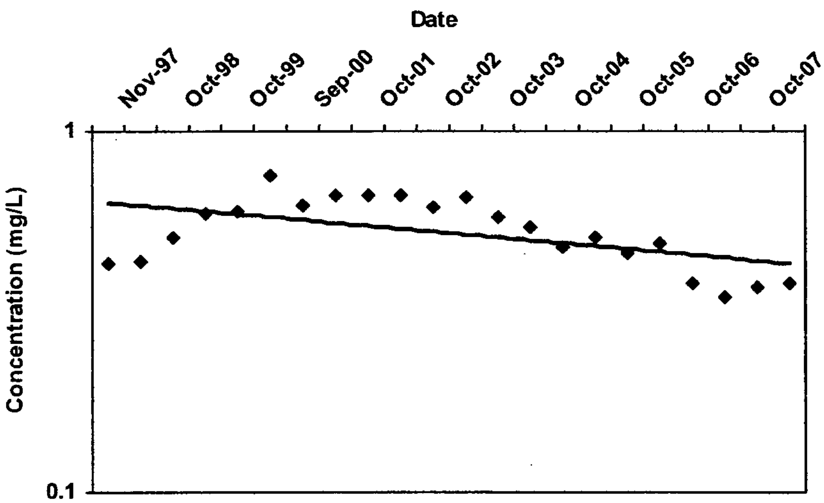
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-16	T	11/20/1997	MOLYBDENUM	1.6E+00		1	1
KM-16	T	5/5/1998	MOLYBDENUM	2.3E+00		1	1
KM-16	T	10/27/1998	MOLYBDENUM	1.4E+00		1	1
KM-16	T	5/4/1999	MOLYBDENUM	1.9E+00		1	1
KM-16	T	10/5/1999	MOLYBDENUM	1.5E+00		1	1
KM-16	T	5/8/2000	MOLYBDENUM	1.7E+00		1	1
KM-16	T	9/25/2000	MOLYBDENUM	1.1E+00		1	1
KM-16	T	4/28/2001	MOLYBDENUM	1.3E+00		1	1
KM-16	T	10/26/2001	MOLYBDENUM	1.0E+00		1	1
KM-16	T	5/31/2002	MOLYBDENUM	1.1E+00		1	1
KM-16	T	10/18/2002	MOLYBDENUM	8.8E-01		1	1
KM-16	T	5/31/2003	MOLYBDENUM	8.4E-01		1	1
KM-16	T	10/23/2003	MOLYBDENUM	7.4E-01		1	1
KM-16	T	5/3/2004	MOLYBDENUM	8.2E-01		1	1
KM-16	T	10/17/2004	MOLYBDENUM	7.0E-01		1	1
KM-16	T	5/3/2005	MOLYBDENUM	8.4E-01		1	1
KM-16	T	10/25/2005	MOLYBDENUM	8.2E-01		1	1
KM-16	T	5/16/2006	MOLYBDENUM	1.2E+00		1	1
KM-16	T	10/23/2006	MOLYBDENUM	8.5E-01		1	1
KM-16	T	5/14/2007	MOLYBDENUM	7.8E-01		1	1
KM-16	T	10/15/2007	MOLYBDENUM	7.5E-01		1	1
KM-16	T	5/5/2008	MOLYBDENUM	7.0E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-17
Well Type: T
COC: MOLYBDENUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.22

Confidence in Trend: 99.5%

Ln Slope: -1.0E-04

LR Concentration Trend: D

Consolidation Data Table:

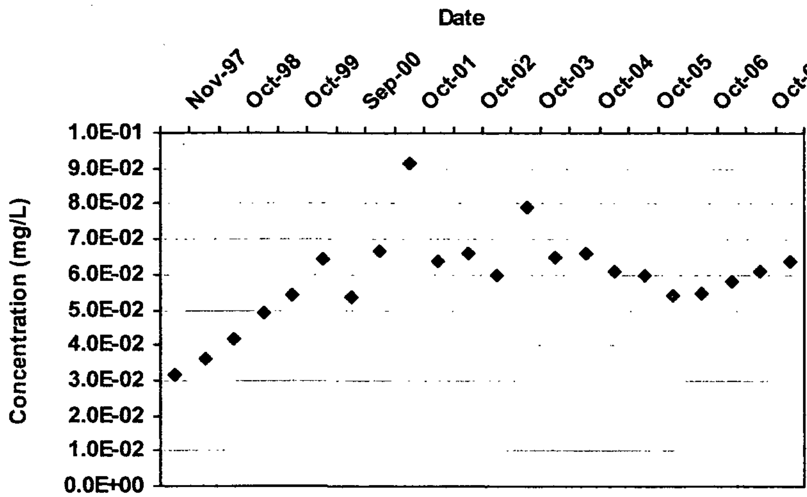
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-17	T	11/20/1997	MOLYBDENUM	4.3E-01		1	1
KM-17	T	5/5/1998	MOLYBDENUM	4.4E-01		1	1
KM-17	T	10/27/1998	MOLYBDENUM	5.1E-01		1	1
KM-17	T	5/4/1999	MOLYBDENUM	5.9E-01		1	1
KM-17	T	10/5/1999	MOLYBDENUM	6.1E-01		1	1
KM-17	T	5/8/2000	MOLYBDENUM	7.5E-01		1	1
KM-17	T	9/25/2000	MOLYBDENUM	6.3E-01		1	1
KM-17	T	4/28/2001	MOLYBDENUM	6.7E-01		1	1
KM-17	T	10/26/2001	MOLYBDENUM	6.6E-01		1	1
KM-17	T	5/31/2002	MOLYBDENUM	6.7E-01		1	1
KM-17	T	10/18/2002	MOLYBDENUM	6.2E-01		1	1
KM-17	T	5/31/2003	MOLYBDENUM	6.6E-01		1	1
KM-17	T	10/23/2003	MOLYBDENUM	5.8E-01		1	1
KM-17	T	5/3/2004	MOLYBDENUM	5.4E-01		1	1
KM-17	T	10/17/2004	MOLYBDENUM	4.8E-01		1	1
KM-17	T	5/3/2005	MOLYBDENUM	5.1E-01		1	1
KM-17	T	10/25/2005	MOLYBDENUM	4.6E-01		1	1
KM-17	T	5/16/2006	MOLYBDENUM	4.9E-01		1	1
KM-17	T	10/23/2006	MOLYBDENUM	3.8E-01		1	1
KM-17	T	5/14/2007	MOLYBDENUM	3.5E-01		1	1
KM-17	T	10/15/2007	MOLYBDENUM	3.7E-01		1	1
KM-17	T	5/5/2008	MOLYBDENUM	3.8E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Mann-Kendall Statistics Summary

Well: Finch Spring
Well Type: T
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: 57

Confidence in Trend: 94.2%

Coefficient of Variation: 0.22

Mann Kendall Concentration Trend: (See Note) PI

Data Table:

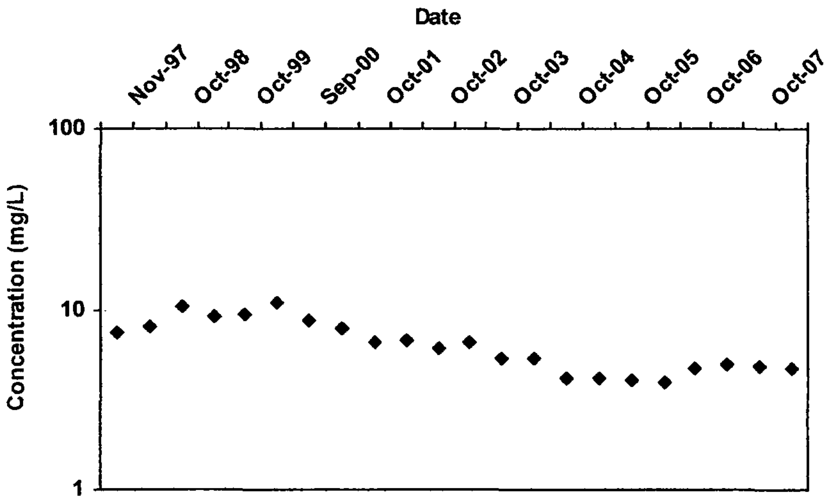
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
Finch Spring	T	11/20/1997	VANADIUM	3.2E-02		1	1
Finch Spring	T	5/5/1998	VANADIUM	3.6E-02		1	1
Finch Spring	T	10/27/1998	VANADIUM	4.2E-02		1	1
Finch Spring	T	5/4/1999	VANADIUM	4.9E-02		1	1
Finch Spring	T	10/5/1999	VANADIUM	5.4E-02		1	1
Finch Spring	T	5/8/2000	VANADIUM	6.5E-02		1	1
Finch Spring	T	9/25/2000	VANADIUM	5.4E-02		1	1
Finch Spring	T	4/27/2001	VANADIUM	6.6E-02		1	1
Finch Spring	T	10/26/2001	VANADIUM	9.2E-02		1	1
Finch Spring	T	5/31/2002	VANADIUM	6.4E-02		1	1
Finch Spring	T	10/18/2002	VANADIUM	6.6E-02		1	1
Finch Spring	T	5/31/2003	VANADIUM	6.0E-02		1	1
Finch Spring	T	10/23/2003	VANADIUM	7.9E-02		1	1
Finch Spring	T	5/3/2004	VANADIUM	6.5E-02		1	1
Finch Spring	T	10/13/2004	VANADIUM	6.6E-02		1	1
Finch Spring	T	5/3/2005	VANADIUM	6.1E-02		1	1
Finch Spring	T	10/25/2005	VANADIUM	6.0E-02		1	1
Finch Spring	T	5/15/2006	VANADIUM	5.4E-02		1	1
Finch Spring	T	10/23/2006	VANADIUM	5.5E-02		1	1
Finch Spring	T	5/14/2007	VANADIUM	5.8E-02		1	1
Finch Spring	T	10/15/2007	VANADIUM	6.1E-02		1	1
Finch Spring	T	5/5/2008	VANADIUM	6.4E-02		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-2
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 to 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -155

Confidence in Trend: 100.0%

Coefficient of Variation: 0.33

Mann Kendall Concentration Trend: (See Note) D

Data Table:

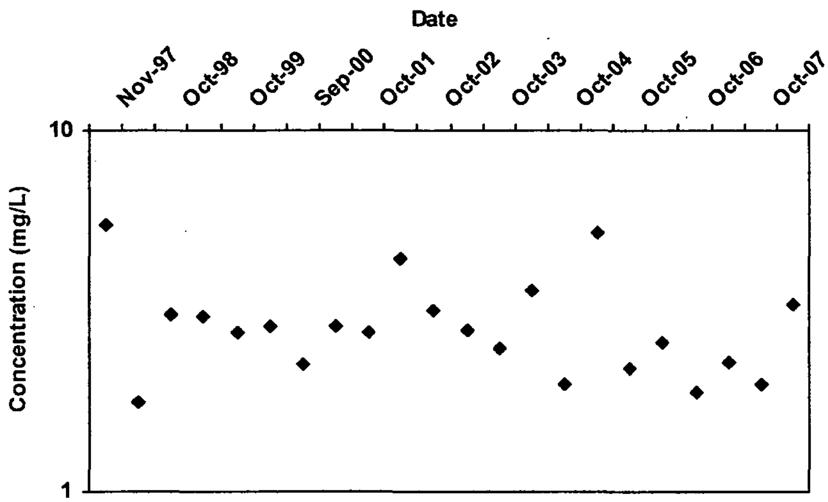
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-2	S	11/20/1997	VANADIUM	7.5E+00		1	1
KM-2	S	5/5/1998	VANADIUM	8.1E+00		1	1
KM-2	S	10/27/1998	VANADIUM	1.0E+01		1	1
KM-2	S	5/4/1999	VANADIUM	9.2E+00		1	1
KM-2	S	10/5/1999	VANADIUM	9.5E+00		1	1
KM-2	S	5/8/2000	VANADIUM	1.1E+01		1	1
KM-2	S	9/25/2000	VANADIUM	8.8E+00		1	1
KM-2	S	4/27/2001	VANADIUM	7.8E+00		1	1
KM-2	S	10/26/2001	VANADIUM	6.7E+00		1	1
KM-2	S	5/31/2002	VANADIUM	6.8E+00		1	1
KM-2	S	10/18/2002	VANADIUM	6.1E+00		1	1
KM-2	S	5/30/2003	VANADIUM	6.5E+00		1	1
KM-2	S	10/23/2003	VANADIUM	5.3E+00		1	1
KM-2	S	5/3/2004	VANADIUM	5.4E+00		1	1
KM-2	S	10/13/2004	VANADIUM	4.2E+00		1	1
KM-2	S	5/3/2005	VANADIUM	4.2E+00		1	1
KM-2	S	10/25/2005	VANADIUM	4.1E+00		1	1
KM-2	S	5/15/2006	VANADIUM	4.0E+00		1	1
KM-2	S	10/23/2006	VANADIUM	4.7E+00		1	1
KM-2	S	5/14/2007	VANADIUM	5.0E+00		1	1
KM-2	S	10/15/2007	VANADIUM	4.8E+00		1	1
KM-2	S	5/5/2008	VANADIUM	4.7E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-3
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-46

Confidence in Trend:
89.6%

Coefficient of Variation:
0.33

Mann Kendall Concentration Trend: (See Note)
S

Data Table:

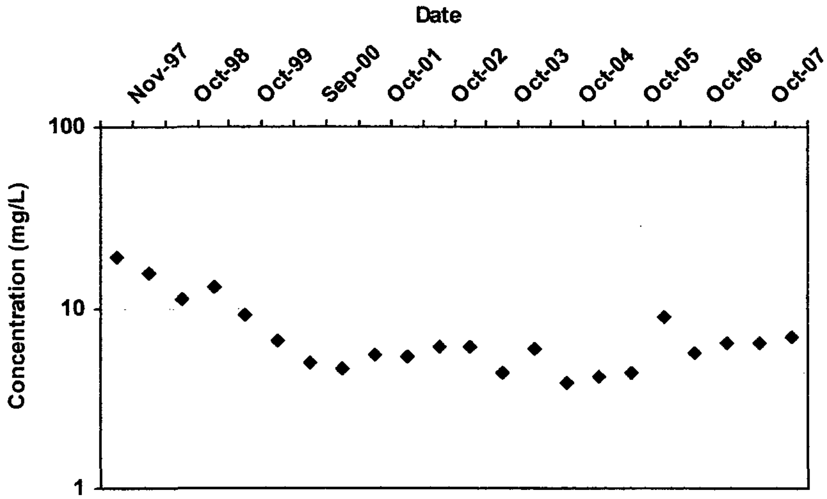
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-3	S	11/20/1997	VANADIUM	5.5E+00		1	1
KM-3	S	5/5/1998	VANADIUM	1.8E+00		1	1
KM-3	S	10/27/1998	VANADIUM	3.1E+00		1	1
KM-3	S	5/4/1999	VANADIUM	3.1E+00		1	1
KM-3	S	10/5/1999	VANADIUM	2.8E+00		1	1
KM-3	S	5/8/2000	VANADIUM	2.9E+00		1	1
KM-3	S	9/25/2000	VANADIUM	2.3E+00		1	1
KM-3	S	4/27/2001	VANADIUM	2.9E+00		1	1
KM-3	S	10/26/2001	VANADIUM	2.8E+00		1	1
KM-3	S	5/31/2002	VANADIUM	4.4E+00		1	1
KM-3	S	10/18/2002	VANADIUM	3.2E+00		1	1
KM-3	S	5/30/2003	VANADIUM	2.8E+00		1	1
KM-3	S	10/23/2003	VANADIUM	2.5E+00		1	1
KM-3	S	5/3/2004	VANADIUM	3.6E+00		1	1
KM-3	S	10/13/2004	VANADIUM	2.0E+00		1	1
KM-3	S	5/3/2005	VANADIUM	5.2E+00		1	1
KM-3	S	10/25/2005	VANADIUM	2.2E+00		1	1
KM-3	S	5/15/2006	VANADIUM	2.6E+00		1	1
KM-3	S	10/23/2006	VANADIUM	1.9E+00		1	1
KM-3	S	5/14/2007	VANADIUM	2.3E+00		1	1
KM-3	S	10/15/2007	VANADIUM	2.0E+00		1	1
KM-3	S	5/5/2008	VANADIUM	3.3E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-4
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:

-68

Confidence in Trend:

97.1%

Coefficient of Variation:

0.53

Mann Kendall Concentration Trend: (See Note)

D

Data Table:

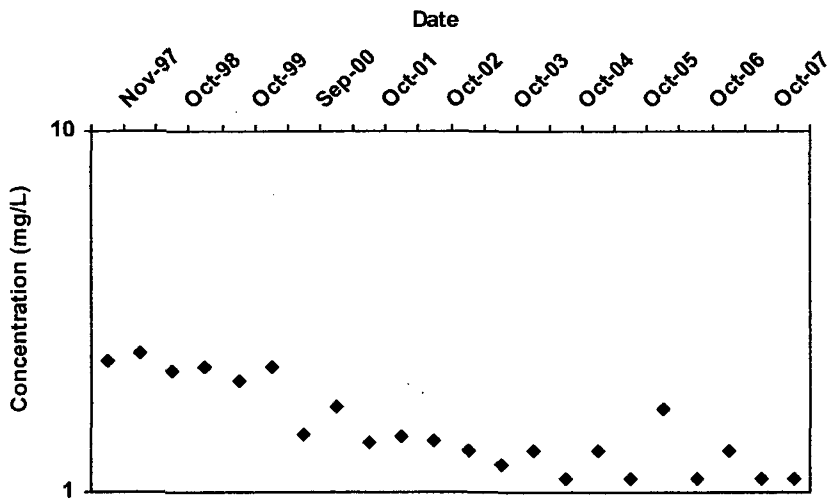
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-4	S	11/20/1997	VANADIUM	1.9E+01		1	1
KM-4	S	5/5/1998	VANADIUM	1.6E+01		1	1
KM-4	S	10/27/1998	VANADIUM	1.1E+01		1	1
KM-4	S	5/4/1999	VANADIUM	1.3E+01		1	1
KM-4	S	10/5/1999	VANADIUM	9.0E+00		1	1
KM-4	S	5/8/2000	VANADIUM	6.6E+00		1	1
KM-4	S	9/25/2000	VANADIUM	5.0E+00		1	1
KM-4	S	4/27/2001	VANADIUM	4.7E+00		1	1
KM-4	S	10/26/2001	VANADIUM	5.5E+00		1	1
KM-4	S	5/31/2002	VANADIUM	5.4E+00		1	1
KM-4	S	10/18/2002	VANADIUM	6.1E+00		1	1
KM-4	S	5/30/2003	VANADIUM	6.1E+00		1	1
KM-4	S	10/23/2003	VANADIUM	4.4E+00		1	1
KM-4	S	5/3/2004	VANADIUM	6.0E+00		1	1
KM-4	S	10/13/2004	VANADIUM	3.9E+00		1	1
KM-4	S	5/3/2005	VANADIUM	4.2E+00		1	1
KM-4	S	10/25/2005	VANADIUM	4.4E+00		1	1
KM-4	S	5/15/2006	VANADIUM	9.0E+00		1	1
KM-4	S	10/23/2006	VANADIUM	5.6E+00		1	1
KM-4	S	5/14/2007	VANADIUM	6.4E+00		1	1
KM-4	S	10/15/2007	VANADIUM	6.4E+00		1	1
KM-4	S	5/5/2008	VANADIUM	6.9E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-5
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-166

Confidence in Trend:
100.0%

Coefficient of Variation:
0.29

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

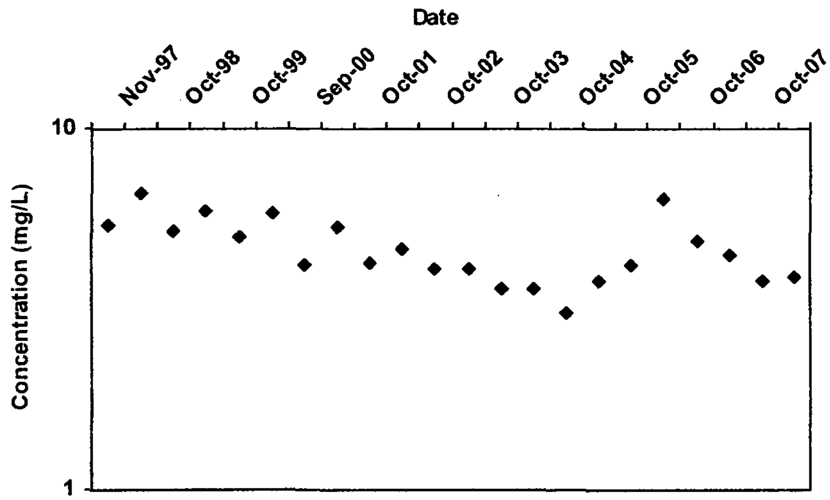
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-5	S	11/20/1997	VANADIUM	2.3E+00		1	1
KM-5	S	5/5/1998	VANADIUM	2.4E+00		1	1
KM-5	S	10/27/1998	VANADIUM	2.2E+00		1	1
KM-5	S	5/4/1999	VANADIUM	2.2E+00		1	1
KM-5	S	10/5/1999	VANADIUM	2.0E+00		1	1
KM-5	S	5/8/2000	VANADIUM	2.2E+00		1	1
KM-5	S	9/25/2000	VANADIUM	1.4E+00		1	1
KM-5	S	4/27/2001	VANADIUM	1.7E+00		1	1
KM-5	S	10/26/2001	VANADIUM	1.4E+00		1	1
KM-5	S	5/31/2002	VANADIUM	1.4E+00		1	1
KM-5	S	10/18/2002	VANADIUM	1.4E+00		1	1
KM-5	S	5/30/2003	VANADIUM	1.3E+00		1	1
KM-5	S	10/23/2003	VANADIUM	1.2E+00		1	1
KM-5	S	5/3/2004	VANADIUM	1.3E+00		1	1
KM-5	S	10/13/2004	VANADIUM	1.1E+00		1	1
KM-5	S	5/3/2005	VANADIUM	1.3E+00		1	1
KM-5	S	10/25/2005	VANADIUM	1.1E+00		1	1
KM-5	S	5/15/2006	VANADIUM	1.7E+00		1	1
KM-5	S	10/23/2006	VANADIUM	1.1E+00		1	1
KM-5	S	5/14/2007	VANADIUM	1.3E+00		1	1
KM-5	S	10/15/2007	VANADIUM	1.1E+00		1	1
KM-5	S	5/5/2008	VANADIUM	1.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-6
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -100

Confidence in Trend: 99.8%

Coefficient of Variation: 0.21

Mann Kendall Concentration Trend: (See Note) D

Data Table:

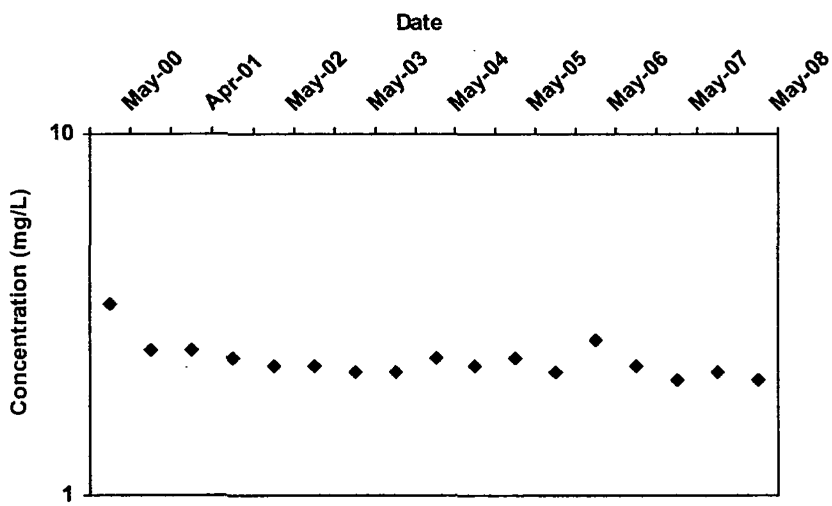
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-6	S	11/20/1997	VANADIUM	5.4E+00		1	1
KM-6	S	5/5/1998	VANADIUM	6.6E+00		1	1
KM-6	S	10/27/1998	VANADIUM	5.2E+00		1	1
KM-6	S	5/4/1999	VANADIUM	5.9E+00		1	1
KM-6	S	10/5/1999	VANADIUM	5.1E+00		1	1
KM-6	S	5/8/2000	VANADIUM	5.8E+00		1	1
KM-6	S	9/25/2000	VANADIUM	4.2E+00		1	1
KM-6	S	4/27/2001	VANADIUM	5.4E+00		1	1
KM-6	S	10/26/2001	VANADIUM	4.2E+00		1	1
KM-6	S	5/31/2002	VANADIUM	4.7E+00		1	1
KM-6	S	10/18/2002	VANADIUM	4.1E+00		1	1
KM-6	S	5/30/2003	VANADIUM	4.1E+00		1	1
KM-6	S	10/23/2003	VANADIUM	3.6E+00		1	1
KM-6	S	5/3/2004	VANADIUM	3.6E+00		1	1
KM-6	S	10/13/2004	VANADIUM	3.1E+00		1	1
KM-6	S	5/3/2005	VANADIUM	3.8E+00		1	1
KM-6	S	10/25/2005	VANADIUM	4.2E+00		1	1
KM-6	S	5/15/2006	VANADIUM	6.4E+00		1	1
KM-6	S	10/23/2006	VANADIUM	4.9E+00		1	1
KM-6	S	5/14/2007	VANADIUM	4.5E+00		1	1
KM-6	S	10/15/2007	VANADIUM	3.8E+00		1	1
KM-6	S	5/5/2008	VANADIUM	3.9E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-7
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-68

Confidence in Trend:
99.8%

Coefficient of Variation:
0.13

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

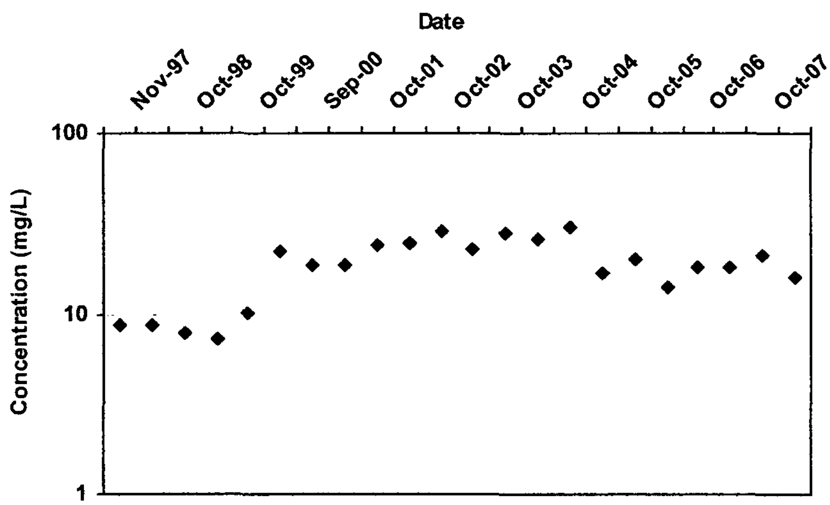
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-7	S	5/8/2000	VANADIUM	3.4E+00		1	1
KM-7	S	9/25/2000	VANADIUM	2.5E+00		1	1
KM-7	S	4/27/2001	VANADIUM	2.5E+00		1	1
KM-7	S	10/26/2001	VANADIUM	2.4E+00		1	1
KM-7	S	5/31/2002	VANADIUM	2.3E+00		1	1
KM-7	S	10/18/2002	VANADIUM	2.3E+00		1	1
KM-7	S	5/30/2003	VANADIUM	2.2E+00		1	1
KM-7	S	10/23/2003	VANADIUM	2.2E+00		1	1
KM-7	S	5/3/2004	VANADIUM	2.4E+00		1	1
KM-7	S	10/13/2004	VANADIUM	2.3E+00		1	1
KM-7	S	5/3/2005	VANADIUM	2.4E+00		1	1
KM-7	S	10/25/2005	VANADIUM	2.2E+00		1	1
KM-7	S	5/15/2006	VANADIUM	2.7E+00		1	1
KM-7	S	10/23/2006	VANADIUM	2.3E+00		1	1
KM-7	S	5/14/2007	VANADIUM	2.1E+00		1	1
KM-7	S	10/15/2007	VANADIUM	2.2E+00		1	1
KM-7	S	5/5/2008	VANADIUM	2.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-8
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:

51

Confidence in Trend:

92.0%

Coefficient of Variation:

0.37

Mann Kendall Concentration Trend: (See Note)

PI

Data Table:

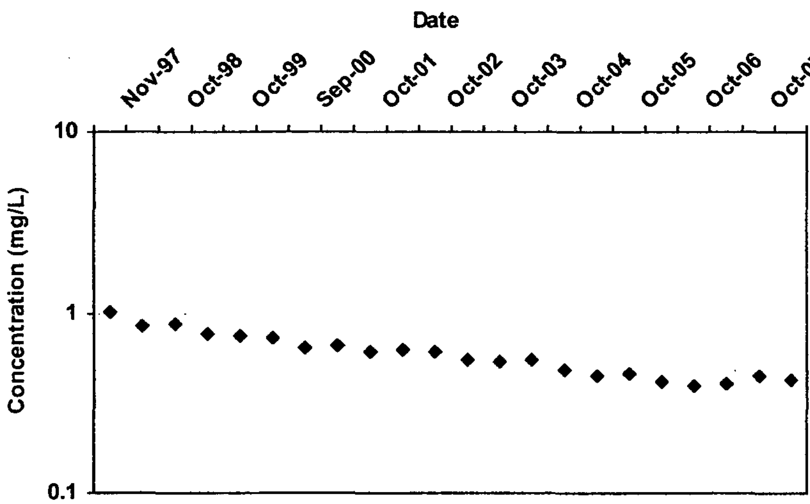
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-8	S	11/20/1997	VANADIUM	8.8E+00		1	1
KM-8	S	5/5/1998	VANADIUM	8.7E+00		1	1
KM-8	S	10/27/1998	VANADIUM	7.9E+00		1	1
KM-8	S	5/4/1999	VANADIUM	7.3E+00		1	1
KM-8	S	10/5/1999	VANADIUM	1.0E+01		1	1
KM-8	S	5/8/2000	VANADIUM	2.2E+01		1	1
KM-8	S	9/25/2000	VANADIUM	1.9E+01		1	1
KM-8	S	4/27/2001	VANADIUM	1.9E+01		1	1
KM-8	S	10/26/2001	VANADIUM	2.4E+01		1	1
KM-8	S	5/31/2002	VANADIUM	2.4E+01		1	1
KM-8	S	10/18/2002	VANADIUM	2.9E+01		1	1
KM-8	S	5/30/2003	VANADIUM	2.3E+01		1	1
KM-8	S	10/23/2003	VANADIUM	2.8E+01		1	1
KM-8	S	5/3/2004	VANADIUM	2.6E+01		1	1
KM-8	S	10/13/2004	VANADIUM	3.0E+01		1	1
KM-8	S	5/3/2005	VANADIUM	1.7E+01		1	1
KM-8	S	10/25/2005	VANADIUM	2.0E+01		1	1
KM-8	S	5/15/2006	VANADIUM	1.4E+01		1	1
KM-8	S	10/23/2006	VANADIUM	1.8E+01		1	1
KM-8	S	5/14/2007	VANADIUM	1.8E+01		1	1
KM-8	S	10/15/2007	VANADIUM	2.1E+01		1	1
KM-8	S	5/5/2008	VANADIUM	1.6E+01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-9
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -204

Confidence in Trend: 100.0%

Coefficient of Variation: 0.28

Mann Kendall Concentration Trend: (See Note) D

Data Table:

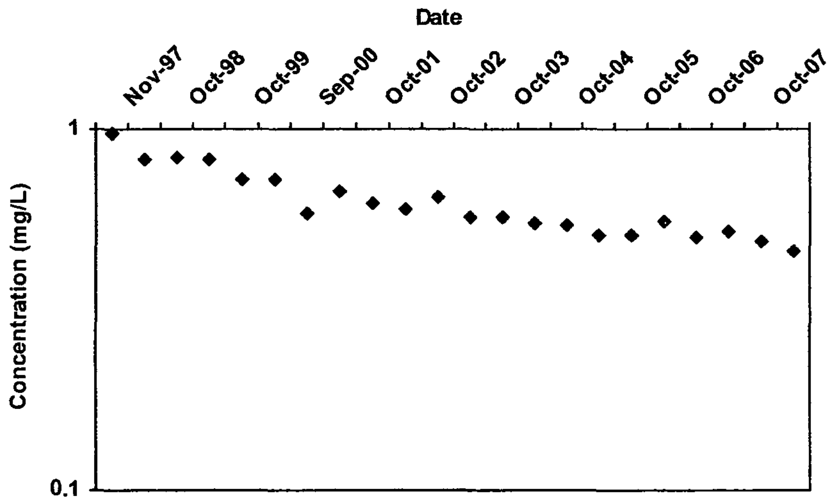
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-9	S	11/20/1997	VANADIUM	1.0E+00		1	1
KM-9	S	5/5/1998	VANADIUM	8.5E-01		1	1
KM-9	S	10/27/1998	VANADIUM	8.7E-01		1	1
KM-9	S	5/4/1999	VANADIUM	7.6E-01		1	1
KM-9	S	10/5/1999	VANADIUM	7.5E-01		1	1
KM-9	S	5/8/2000	VANADIUM	7.2E-01		1	1
KM-9	S	9/25/2000	VANADIUM	6.4E-01		1	1
KM-9	S	4/27/2001	VANADIUM	6.5E-01		1	1
KM-9	S	10/26/2001	VANADIUM	6.1E-01		1	1
KM-9	S	5/31/2002	VANADIUM	6.2E-01		1	1
KM-9	S	10/18/2002	VANADIUM	6.1E-01		1	1
KM-9	S	5/30/2003	VANADIUM	5.5E-01		1	1
KM-9	S	10/23/2003	VANADIUM	5.4E-01		1	1
KM-9	S	5/3/2004	VANADIUM	5.5E-01		1	1
KM-9	S	10/13/2004	VANADIUM	4.9E-01		1	1
KM-9	S	5/3/2005	VANADIUM	4.5E-01		1	1
KM-9	S	10/25/2005	VANADIUM	4.6E-01		1	1
KM-9	S	5/15/2006	VANADIUM	4.2E-01		1	1
KM-9	S	10/23/2006	VANADIUM	4.0E-01		1	1
KM-9	S	5/14/2007	VANADIUM	4.1E-01		1	1
KM-9	S	10/15/2007	VANADIUM	4.5E-01		1	1
KM-9	S	5/5/2008	VANADIUM	4.3E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - *Due to insufficient Data (< 4 sampling events); ND = Non-detect*

MAROS Mann-Kendall Statistics Summary

Well: KM-13
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-197

Confidence in Trend:
100.0%

Coefficient of Variation:
0.22

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

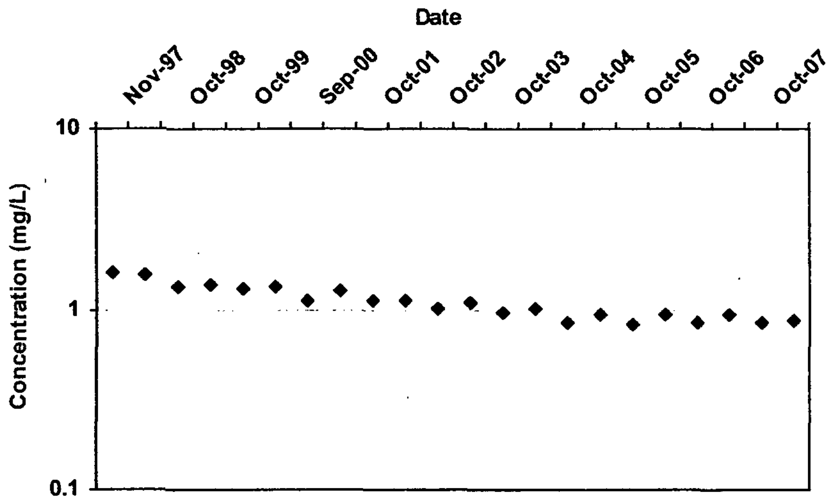
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-13	S	11/20/1997	VANADIUM	9.7E-01		1	1
KM-13	S	5/5/1998	VANADIUM	8.3E-01		1	1
KM-13	S	10/27/1998	VANADIUM	8.4E-01		1	1
KM-13	S	5/4/1999	VANADIUM	8.3E-01		1	1
KM-13	S	10/5/1999	VANADIUM	7.3E-01		1	1
KM-13	S	5/8/2000	VANADIUM	7.3E-01		1	1
KM-13	S	9/25/2000	VANADIUM	5.9E-01		1	1
KM-13	S	4/27/2001	VANADIUM	6.7E-01		1	1
KM-13	S	10/26/2001	VANADIUM	6.2E-01		1	1
KM-13	S	5/31/2002	VANADIUM	6.0E-01		1	1
KM-13	S	10/18/2002	VANADIUM	6.5E-01		1	1
KM-13	S	5/30/2003	VANADIUM	5.7E-01		1	1
KM-13	S	10/23/2003	VANADIUM	5.7E-01		1	1
KM-13	S	5/3/2004	VANADIUM	5.5E-01		1	1
KM-13	S	10/13/2004	VANADIUM	5.4E-01		1	1
KM-13	S	5/3/2005	VANADIUM	5.1E-01		1	1
KM-13	S	10/25/2005	VANADIUM	5.1E-01		1	1
KM-13	S	5/15/2006	VANADIUM	5.6E-01		1	1
KM-13	S	10/23/2006	VANADIUM	5.0E-01		1	1
KM-13	S	5/14/2007	VANADIUM	5.2E-01		1	1
KM-13	S	10/15/2007	VANADIUM	4.9E-01		1	1
KM-13	S	5/5/2008	VANADIUM	4.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-15
Well Type: T
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-184

Confidence in Trend:
100.0%

Coefficient of Variation:
0.21

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

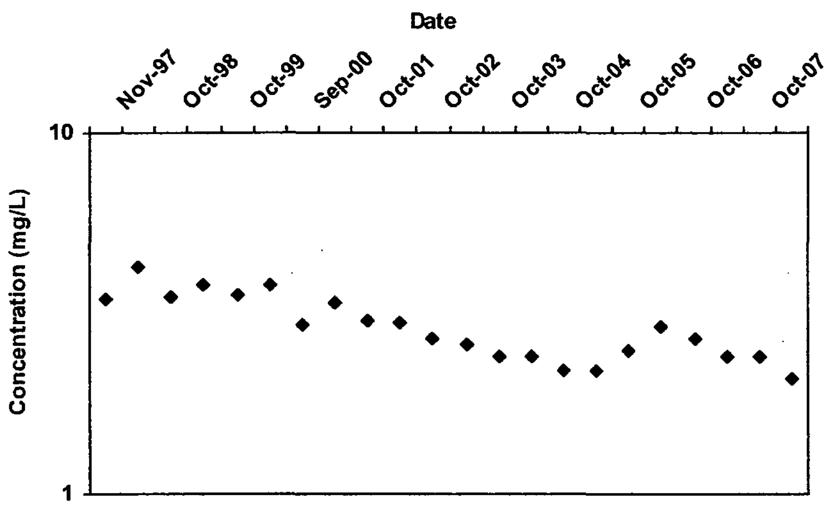
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-15	T	11/20/1997	VANADIUM	1.6E+00		1	1
KM-15	T	5/5/1998	VANADIUM	1.6E+00		1	1
KM-15	T	10/27/1998	VANADIUM	1.4E+00		1	1
KM-15	T	5/4/1999	VANADIUM	1.4E+00		1	1
KM-15	T	10/5/1999	VANADIUM	1.3E+00		1	1
KM-15	T	5/8/2000	VANADIUM	1.3E+00		1	1
KM-15	T	9/25/2000	VANADIUM	1.1E+00		1	1
KM-15	T	4/27/2001	VANADIUM	1.3E+00		1	1
KM-15	T	10/26/2001	VANADIUM	1.1E+00		1	1
KM-15	T	5/31/2002	VANADIUM	1.1E+00		1	1
KM-15	T	10/18/2002	VANADIUM	1.0E+00		1	1
KM-15	T	5/30/2003	VANADIUM	1.1E+00		1	1
KM-15	T	10/23/2003	VANADIUM	9.6E-01		1	1
KM-15	T	5/3/2004	VANADIUM	1.0E+00		1	1
KM-15	T	10/13/2004	VANADIUM	8.5E-01		1	1
KM-15	T	5/3/2005	VANADIUM	9.3E-01		1	1
KM-15	T	10/25/2005	VANADIUM	8.3E-01		1	1
KM-15	T	5/15/2006	VANADIUM	9.5E-01		1	1
KM-15	T	10/23/2006	VANADIUM	8.5E-01		1	1
KM-15	T	5/14/2007	VANADIUM	9.4E-01		1	1
KM-15	T	10/15/2007	VANADIUM	8.5E-01		1	1
KM-15	T	5/5/2008	VANADIUM	8.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-16
Well Type: T
COC: VANADIUM

Time Period: 10/10/1997 to 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -155

Confidence in Trend: 100.0%

Coefficient of Variation: 0.21

Mann Kendall Concentration Trend: (See Note) D

Data Table:

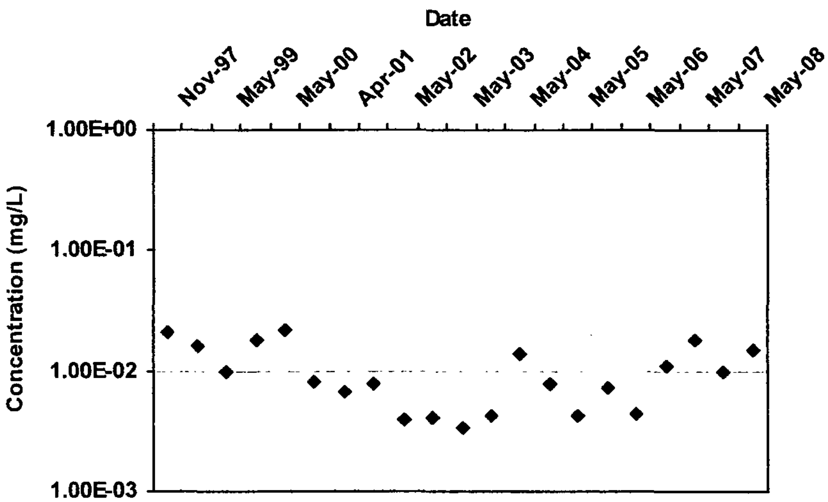
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-16	T	11/20/1997	VANADIUM	3.5E+00		1	1
KM-16	T	5/5/1998	VANADIUM	4.3E+00		1	1
KM-16	T	10/27/1998	VANADIUM	3.5E+00		1	1
KM-16	T	5/4/1999	VANADIUM	3.8E+00		1	1
KM-16	T	10/5/1999	VANADIUM	3.6E+00		1	1
KM-16	T	5/8/2000	VANADIUM	3.8E+00		1	1
KM-16	T	9/25/2000	VANADIUM	2.9E+00		1	1
KM-16	T	4/27/2001	VANADIUM	3.4E+00		1	1
KM-16	T	10/26/2001	VANADIUM	3.0E+00		1	1
KM-16	T	5/31/2002	VANADIUM	3.0E+00		1	1
KM-16	T	10/18/2002	VANADIUM	2.7E+00		1	1
KM-16	T	5/30/2003	VANADIUM	2.6E+00		1	1
KM-16	T	10/23/2003	VANADIUM	2.4E+00		1	1
KM-16	T	5/3/2004	VANADIUM	2.4E+00		1	1
KM-16	T	10/13/2004	VANADIUM	2.2E+00		1	1
KM-16	T	5/3/2005	VANADIUM	2.2E+00		1	1
KM-16	T	10/25/2005	VANADIUM	2.5E+00		1	1
KM-16	T	5/15/2006	VANADIUM	2.9E+00		1	1
KM-16	T	10/23/2006	VANADIUM	2.7E+00		1	1
KM-16	T	5/14/2007	VANADIUM	2.4E+00		1	1
KM-16	T	10/15/2007	VANADIUM	2.4E+00		1	1
KM-16	T	5/5/2008	VANADIUM	2.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-17
Well Type: T
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/5/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:

-22

Confidence in Trend:

73.5%

Coefficient of Variation:

0.58

Mann Kendall Concentration Trend: (See Note)

S

Data Table:

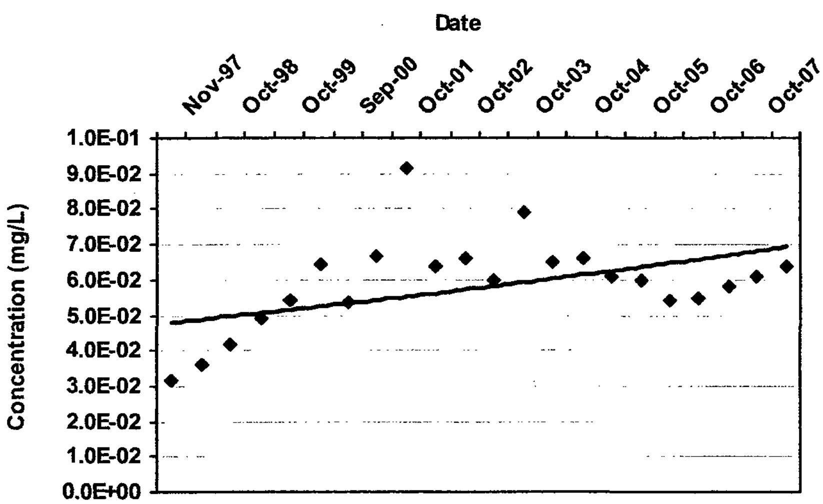
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-17	T	11/20/1997	VANADIUM	2.1E-02		1	1
KM-17	T	10/27/1998	VANADIUM	1.7E-02		1	1
KM-17	T	5/4/1999	VANADIUM	9.8E-03		1	1
KM-17	T	10/5/1999	VANADIUM	1.9E-02		1	1
KM-17	T	5/8/2000	VANADIUM	2.2E-02		1	1
KM-17	T	9/25/2000	VANADIUM	8.2E-03		1	1
KM-17	T	4/27/2001	VANADIUM	6.8E-03		1	1
KM-17	T	10/26/2001	VANADIUM	7.8E-03		1	1
KM-17	T.	5/31/2002	VANADIUM	4.0E-03		1	1
KM-17	T	10/18/2002	VANADIUM	4.1E-03		1	1
KM-17	T	5/30/2003	VANADIUM	3.4E-03		1	1
KM-17	T	10/23/2003	VANADIUM	4.2E-03		1	1
KM-17	T	5/3/2004	VANADIUM	1.4E-02		1	1
KM-17	T	10/13/2004	VANADIUM	8.0E-03		1	1
KM-17	T	5/3/2005	VANADIUM	4.3E-03		1	1
KM-17	T	10/25/2005	VANADIUM	7.4E-03		1	1
KM-17	T	5/15/2006	VANADIUM	4.4E-03		1	1
KM-17	T	10/23/2006	VANADIUM	1.1E-02		1	1
KM-17	T	5/14/2007	VANADIUM	1.8E-02		1	1
KM-17	T	10/15/2007	VANADIUM	1.0E-02		1	1
KM-17	T	5/5/2008	VANADIUM	1.5E-02		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Linear Regression Statistics

Well: Finch Spring
Well Type: T
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.22

Confidence in Trend: 98.9%

Ln Slope: 9.6E-05

LR Concentration Trend: I

Consolidation Data Table:

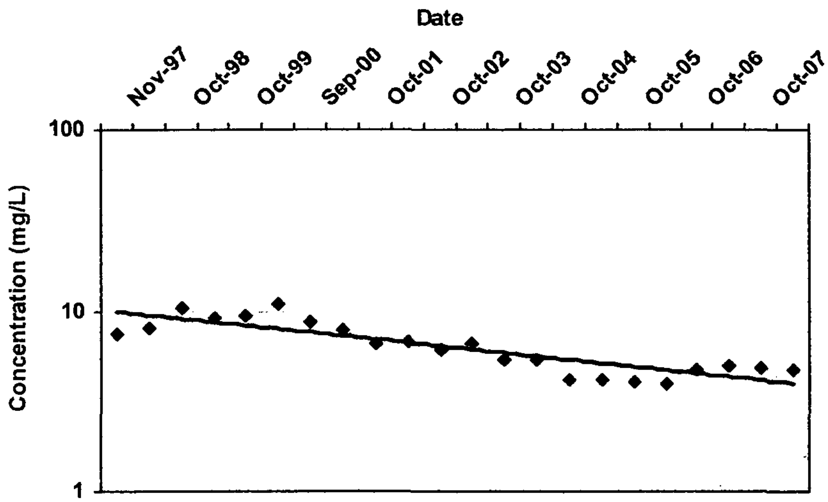
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
Finch Spring	T	11/20/1997	VANADIUM	3.2E-02		1	1
Finch Spring	T	5/5/1998	VANADIUM	3.6E-02		1	1
Finch Spring	T	10/27/1998	VANADIUM	4.2E-02		1	1
Finch Spring	T	5/4/1999	VANADIUM	4.9E-02		1	1
Finch Spring	T	10/5/1999	VANADIUM	5.4E-02		1	1
Finch Spring	T	5/8/2000	VANADIUM	6.5E-02		1	1
Finch Spring	T	9/25/2000	VANADIUM	5.4E-02		1	1
Finch Spring	T	4/27/2001	VANADIUM	6.6E-02		1	1
Finch Spring	T	10/26/2001	VANADIUM	9.2E-02		1	1
Finch Spring	T	5/31/2002	VANADIUM	6.4E-02		1	1
Finch Spring	T	10/18/2002	VANADIUM	6.6E-02		1	1
Finch Spring	T	5/31/2003	VANADIUM	6.0E-02		1	1
Finch Spring	T	10/23/2003	VANADIUM	7.9E-02		1	1
Finch Spring	T	5/3/2004	VANADIUM	6.5E-02		1	1
Finch Spring	T	10/13/2004	VANADIUM	6.6E-02		1	1
Finch Spring	T	5/3/2005	VANADIUM	6.1E-02		1	1
Finch Spring	T	10/25/2005	VANADIUM	6.0E-02		1	1
Finch Spring	T	5/15/2006	VANADIUM	5.4E-02		1	1
Finch Spring	T	10/23/2006	VANADIUM	5.5E-02		1	1
Finch Spring	T	5/14/2007	VANADIUM	5.8E-02		1	1
Finch Spring	T	10/15/2007	VANADIUM	6.1E-02		1	1
Finch Spring	T	5/5/2008	VANADIUM	6.4E-02		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-2
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.33

Confidence in Trend: 100.0%

Ln Slope: -2.4E-04

LR Concentration Trend: D

Consolidation Data Table:

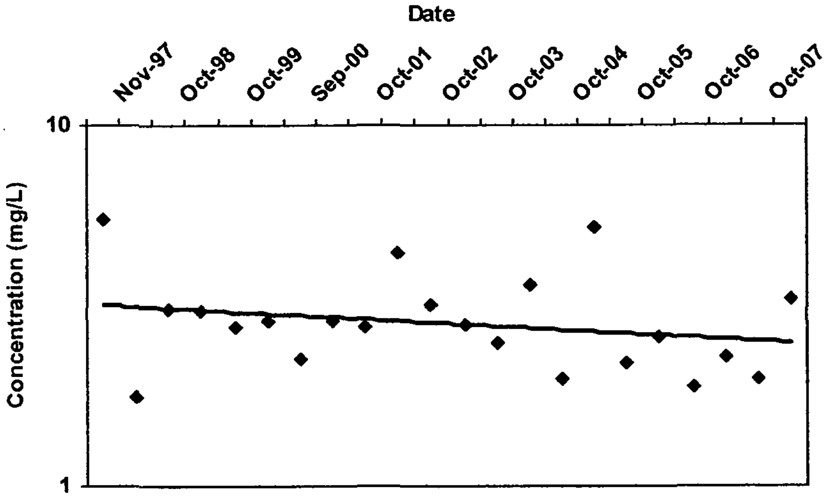
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-2	S	11/20/1997	VANADIUM	7.5E+00		1	1
KM-2	S	5/5/1998	VANADIUM	8.1E+00		1	1
KM-2	S	10/27/1998	VANADIUM	1.0E+01		1	1
KM-2	S	5/4/1999	VANADIUM	9.2E+00		1	1
KM-2	S	10/5/1999	VANADIUM	9.5E+00		1	1
KM-2	S	5/8/2000	VANADIUM	1.1E+01		1	1
KM-2	S	9/25/2000	VANADIUM	8.8E+00		1	1
KM-2	S	4/27/2001	VANADIUM	7.8E+00		1	1
KM-2	S	10/26/2001	VANADIUM	6.7E+00		1	1
KM-2	S	5/31/2002	VANADIUM	6.8E+00		1	1
KM-2	S	10/18/2002	VANADIUM	6.1E+00		1	1
KM-2	S	5/30/2003	VANADIUM	6.5E+00		1	1
KM-2	S	10/23/2003	VANADIUM	5.3E+00		1	1
KM-2	S	5/3/2004	VANADIUM	5.4E+00		1	1
KM-2	S	10/13/2004	VANADIUM	4.2E+00		1	1
KM-2	S	5/3/2005	VANADIUM	4.2E+00		1	1
KM-2	S	10/25/2005	VANADIUM	4.1E+00		1	1
KM-2	S	5/15/2006	VANADIUM	4.0E+00		1	1
KM-2	S	10/23/2006	VANADIUM	4.7E+00		1	1
KM-2	S	5/14/2007	VANADIUM	5.0E+00		1	1
KM-2	S	10/15/2007	VANADIUM	4.8E+00		1	1
KM-2	S	5/5/2008	VANADIUM	4.7E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-3
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.33

Confidence in Trend: 85.8%

Ln Slope: -6.1E-05

LR Concentration Trend: S

Consolidation Data Table:

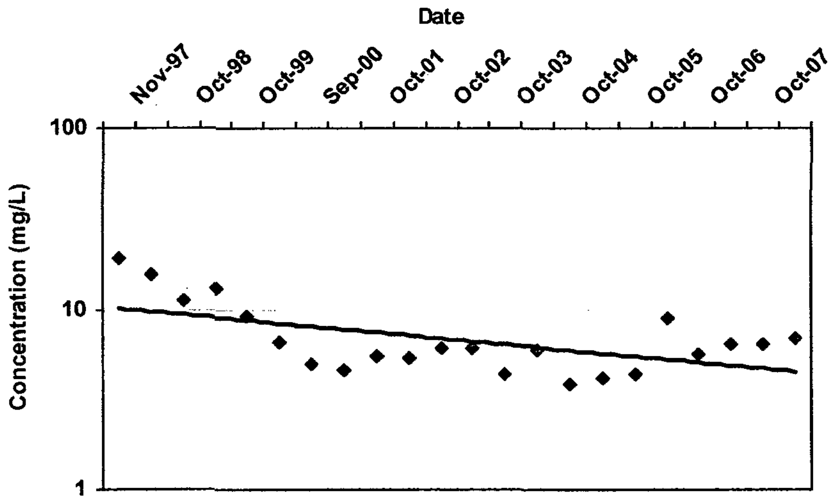
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-3	S	11/20/1997	VANADIUM	5.5E+00		1	1
KM-3	S	5/5/1998	VANADIUM	1.8E+00		1	1
KM-3	S	10/27/1998	VANADIUM	3.1E+00		1	1
KM-3	S	5/4/1999	VANADIUM	3.1E+00		1	1
KM-3	S	10/5/1999	VANADIUM	2.8E+00		1	1
KM-3	S	5/8/2000	VANADIUM	2.9E+00		1	1
KM-3	S	9/25/2000	VANADIUM	2.3E+00		1	1
KM-3	S	4/27/2001	VANADIUM	2.9E+00		1	1
KM-3	S	10/26/2001	VANADIUM	2.8E+00		1	1
KM-3	S	5/31/2002	VANADIUM	4.4E+00		1	1
KM-3	S	10/18/2002	VANADIUM	3.2E+00		1	1
KM-3	S	5/30/2003	VANADIUM	2.8E+00		1	1
KM-3	S	10/23/2003	VANADIUM	2.5E+00		1	1
KM-3	S	5/3/2004	VANADIUM	3.6E+00		1	1
KM-3	S	10/13/2004	VANADIUM	2.0E+00		1	1
KM-3	S	5/3/2005	VANADIUM	5.2E+00		1	1
KM-3	S	10/25/2005	VANADIUM	2.2E+00		1	1
KM-3	S	5/15/2006	VANADIUM	2.6E+00		1	1
KM-3	S	10/23/2006	VANADIUM	1.9E+00		1	1
KM-3	S	5/14/2007	VANADIUM	2.3E+00		1	1
KM-3	S	10/15/2007	VANADIUM	2.0E+00		1	1
KM-3	S	5/5/2008	VANADIUM	3.3E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-4
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV:
0.53

Confidence in Trend:
99.7%

Ln Slope:
-2.1E-04

LR Concentration Trend:
D

Consolidation Data Table:

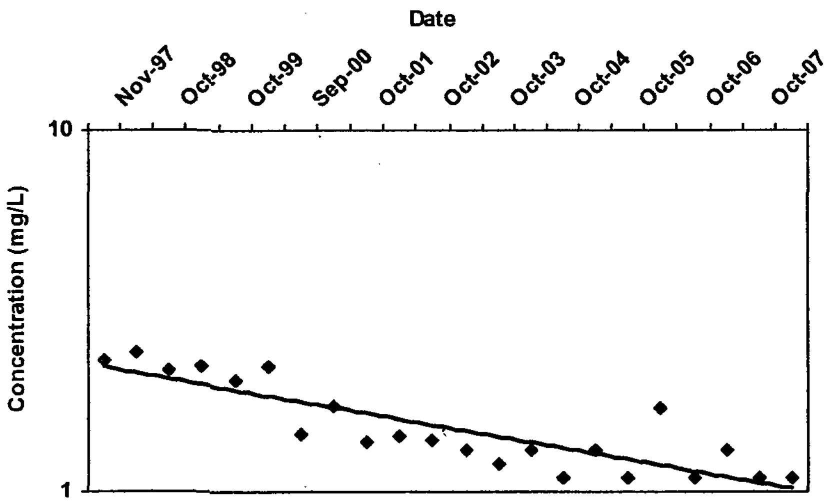
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-4	S	11/20/1997	VANADIUM	1.9E+01		1	1
KM-4	S	5/5/1998	VANADIUM	1.6E+01		1	1
KM-4	S	10/27/1998	VANADIUM	1.1E+01		1	1
KM-4	S	5/4/1999	VANADIUM	1.3E+01		1	1
KM-4	S	10/5/1999	VANADIUM	9.0E+00		1	1
KM-4	S	5/8/2000	VANADIUM	6.6E+00		1	1
KM-4	S	9/25/2000	VANADIUM	5.0E+00		1	1
KM-4	S	4/27/2001	VANADIUM	4.7E+00		1	1
KM-4	S	10/26/2001	VANADIUM	5.5E+00		1	1
KM-4	S	5/31/2002	VANADIUM	5.4E+00		1	1
KM-4	S	10/18/2002	VANADIUM	6.1E+00		1	1
KM-4	S	5/30/2003	VANADIUM	6.1E+00		1	1
KM-4	S	10/23/2003	VANADIUM	4.4E+00		1	1
KM-4	S	5/3/2004	VANADIUM	6.0E+00		1	1
KM-4	S	10/13/2004	VANADIUM	3.9E+00		1	1
KM-4	S	5/3/2005	VANADIUM	4.2E+00		1	1
KM-4	S	10/25/2005	VANADIUM	4.4E+00		1	1
KM-4	S	5/15/2006	VANADIUM	9.0E+00		1	1
KM-4	S	10/23/2006	VANADIUM	5.6E+00		1	1
KM-4	S	5/14/2007	VANADIUM	6.4E+00		1	1
KM-4	S	10/15/2007	VANADIUM	6.4E+00		1	1
KM-4	S	5/5/2008	VANADIUM	6.9E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-5
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.29

Confidence in Trend: 100.0%

Ln Slope: -2.0E-04

LR Concentration Trend: D

Consolidation Data Table:

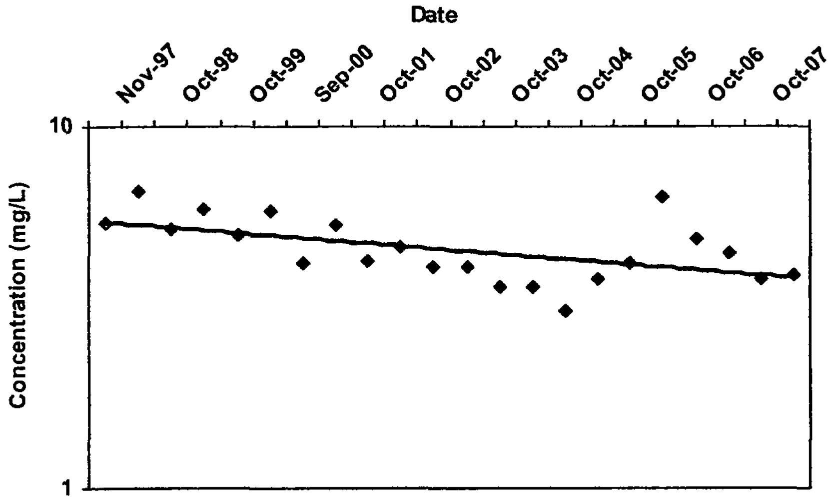
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-5	S	11/20/1997	VANADIUM	2.3E+00		1	1
KM-5	S	5/5/1998	VANADIUM	2.4E+00		1	1
KM-5	S	10/27/1998	VANADIUM	2.2E+00		1	1
KM-5	S	5/4/1999	VANADIUM	2.2E+00		1	1
KM-5	S	10/5/1999	VANADIUM	2.0E+00		1	1
KM-5	S	5/8/2000	VANADIUM	2.2E+00		1	1
KM-5	S	9/25/2000	VANADIUM	1.4E+00		1	1
KM-5	S	4/27/2001	VANADIUM	1.7E+00		1	1
KM-5	S	10/26/2001	VANADIUM	1.4E+00		1	1
KM-5	S	5/31/2002	VANADIUM	1.4E+00		1	1
KM-5	S	10/18/2002	VANADIUM	1.4E+00		1	1
KM-5	S	5/30/2003	VANADIUM	1.3E+00		1	1
KM-5	S	10/23/2003	VANADIUM	1.2E+00		1	1
KM-5	S	5/3/2004	VANADIUM	1.3E+00		1	1
KM-5	S	10/13/2004	VANADIUM	1.1E+00		1	1
KM-5	S	5/3/2005	VANADIUM	1.3E+00		1	1
KM-5	S	10/25/2005	VANADIUM	1.1E+00		1	1
KM-5	S	5/15/2006	VANADIUM	1.7E+00		1	1
KM-5	S	10/23/2006	VANADIUM	1.1E+00		1	1
KM-5	S	5/14/2007	VANADIUM	1.3E+00		1	1
KM-5	S	10/15/2007	VANADIUM	1.1E+00		1	1
KM-5	S	5/5/2008	VANADIUM	1.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-6
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.21

Confidence in Trend: 99.5%

Ln Slope: -9.2E-05

LR Concentration Trend: D

Consolidation Data Table:

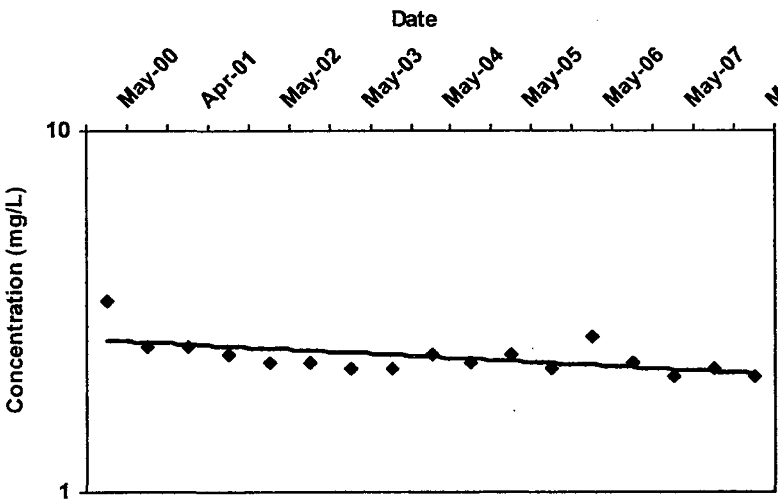
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-6	S	11/20/1997	VANADIUM	5.4E+00		1	1
KM-6	S	5/5/1998	VANADIUM	6.6E+00		1	1
KM-6	S	10/27/1998	VANADIUM	5.2E+00		1	1
KM-6	S	5/4/1999	VANADIUM	5.9E+00		1	1
KM-6	S	10/5/1999	VANADIUM	5.1E+00		1	1
KM-6	S	5/8/2000	VANADIUM	5.8E+00		1	1
KM-6	S	9/25/2000	VANADIUM	4.2E+00		1	1
KM-6	S	4/27/2001	VANADIUM	5.4E+00		1	1
KM-6	S	10/26/2001	VANADIUM	4.2E+00		1	1
KM-6	S	5/31/2002	VANADIUM	4.7E+00		1	1
KM-6	S	10/18/2002	VANADIUM	4.1E+00		1	1
KM-6	S	5/30/2003	VANADIUM	4.1E+00		1	1
KM-6	S	10/23/2003	VANADIUM	3.6E+00		1	1
KM-6	S	5/3/2004	VANADIUM	3.6E+00		1	1
KM-6	S	10/13/2004	VANADIUM	3.1E+00		1	1
KM-6	S	5/3/2005	VANADIUM	3.8E+00		1	1
KM-6	S	10/25/2005	VANADIUM	4.2E+00		1	1
KM-6	S	5/15/2006	VANADIUM	6.4E+00		1	1
KM-6	S	10/23/2006	VANADIUM	4.9E+00		1	1
KM-6	S	5/14/2007	VANADIUM	4.5E+00		1	1
KM-6	S	10/15/2007	VANADIUM	3.8E+00		1	1
KM-6	S	5/5/2008	VANADIUM	3.9E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-7
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.13

Confidence in Trend: 99.3%

Ln Slope: -7.3E-05

LR Concentration Trend: D

Consolidation Data Table:

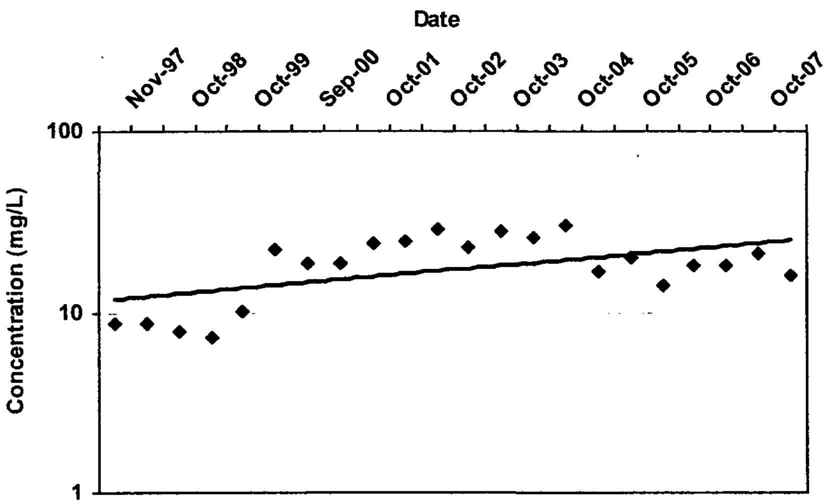
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-7	S	5/8/2000	VANADIUM	3.4E+00		1	1
KM-7	S	9/25/2000	VANADIUM	2.5E+00		1	1
KM-7	S	4/27/2001	VANADIUM	2.5E+00		1	1
KM-7	S	10/26/2001	VANADIUM	2.4E+00		1	1
KM-7	S	5/31/2002	VANADIUM	2.3E+00		1	1
KM-7	S	10/18/2002	VANADIUM	2.3E+00		1	1
KM-7	S	5/30/2003	VANADIUM	2.2E+00		1	1
KM-7	S	10/23/2003	VANADIUM	2.2E+00		1	1
KM-7	S	5/3/2004	VANADIUM	2.4E+00		1	1
KM-7	S	10/13/2004	VANADIUM	2.3E+00		1	1
KM-7	S	5/3/2005	VANADIUM	2.4E+00		1	1
KM-7	S	10/25/2005	VANADIUM	2.2E+00		1	1
KM-7	S	5/15/2006	VANADIUM	2.7E+00		1	1
KM-7	S	10/23/2006	VANADIUM	2.3E+00		1	1
KM-7	S	5/14/2007	VANADIUM	2.1E+00		1	1
KM-7	S	10/15/2007	VANADIUM	2.2E+00		1	1
KM-7	S	5/5/2008	VANADIUM	2.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-8
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 to 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.37

Confidence in Trend: 99.4%

Ln Slope: 1.9E-04

LR Concentration Trend: I

Consolidation Data Table:

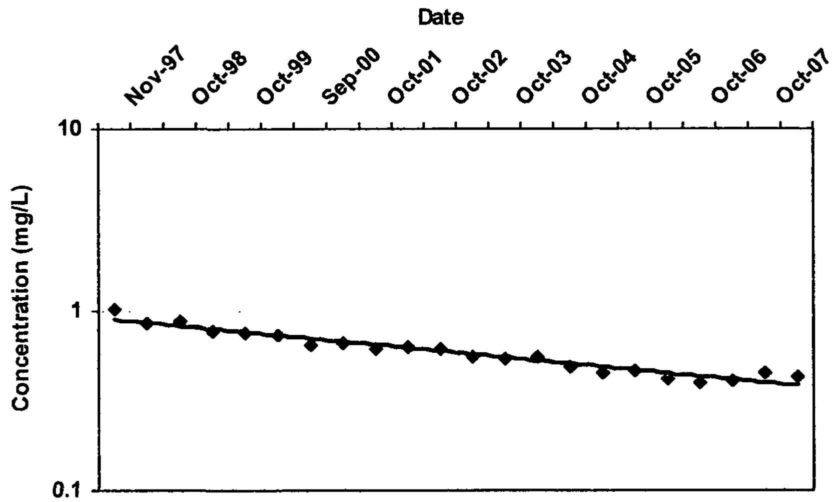
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-8	S	11/20/1997	VANADIUM	8.8E+00		1	1
KM-8	S	5/5/1998	VANADIUM	8.7E+00		1	1
KM-8	S	10/27/1998	VANADIUM	7.9E+00		1	1
KM-8	S	5/4/1999	VANADIUM	7.3E+00		1	1
KM-8	S	10/5/1999	VANADIUM	1.0E+01		1	1
KM-8	S	5/8/2000	VANADIUM	2.2E+01		1	1
KM-8	S	9/25/2000	VANADIUM	1.9E+01		1	1
KM-8	S	4/27/2001	VANADIUM	1.9E+01		1	1
KM-8	S	10/26/2001	VANADIUM	2.4E+01		1	1
KM-8	S	5/31/2002	VANADIUM	2.4E+01		1	1
KM-8	S	10/18/2002	VANADIUM	2.9E+01		1	1
KM-8	S	5/30/2003	VANADIUM	2.3E+01		1	1
KM-8	S	10/23/2003	VANADIUM	2.8E+01		1	1
KM-8	S	5/3/2004	VANADIUM	2.6E+01		1	1
KM-8	S	10/13/2004	VANADIUM	3.0E+01		1	1
KM-8	S	5/3/2005	VANADIUM	1.7E+01		1	1
KM-8	S	10/25/2005	VANADIUM	2.0E+01		1	1
KM-8	S	5/15/2006	VANADIUM	1.4E+01		1	1
KM-8	S	10/23/2006	VANADIUM	1.8E+01		1	1
KM-8	S	5/14/2007	VANADIUM	1.8E+01		1	1
KM-8	S	10/15/2007	VANADIUM	2.1E+01		1	1
KM-8	S	5/5/2008	VANADIUM	1.6E+01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - *Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect*

MAROS Linear Regression Statistics

Well: KM-9
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.28

Confidence in Trend: 100.0%

Ln Slope: -2.2E-04

LR Concentration Trend: D

Consolidation Data Table:

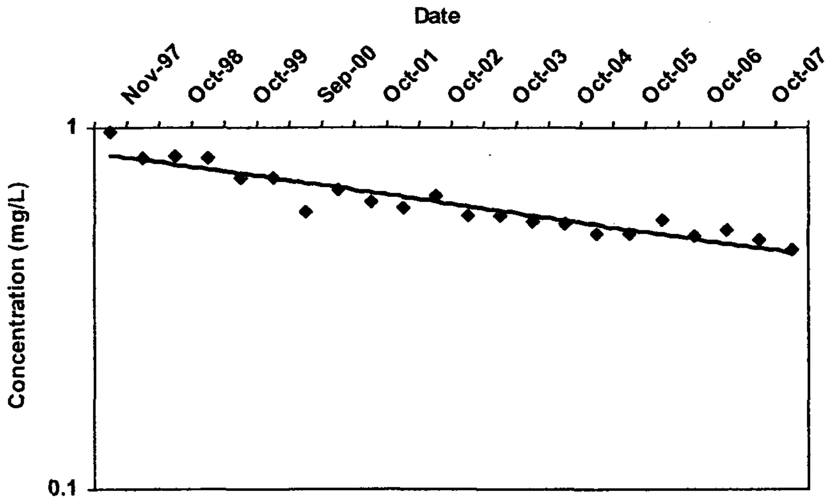
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-9	S	11/20/1997	VANADIUM	1.0E+00		1	1
KM-9	S	5/5/1998	VANADIUM	8.5E-01		1	1
KM-9	S	10/27/1998	VANADIUM	8.7E-01		1	1
KM-9	S	5/4/1999	VANADIUM	7.6E-01		1	1
KM-9	S	10/5/1999	VANADIUM	7.5E-01		1	1
KM-9	S	5/8/2000	VANADIUM	7.2E-01		1	1
KM-9	S	9/25/2000	VANADIUM	6.4E-01		1	1
KM-9	S	4/27/2001	VANADIUM	6.5E-01		1	1
KM-9	S	10/26/2001	VANADIUM	6.1E-01		1	1
KM-9	S	5/31/2002	VANADIUM	6.2E-01		1	1
KM-9	S	10/18/2002	VANADIUM	6.1E-01		1	1
KM-9	S	5/30/2003	VANADIUM	5.5E-01		1	1
KM-9	S	10/23/2003	VANADIUM	5.4E-01		1	1
KM-9	S	5/3/2004	VANADIUM	5.5E-01		1	1
KM-9	S	10/13/2004	VANADIUM	4.9E-01		1	1
KM-9	S	5/3/2005	VANADIUM	4.5E-01		1	1
KM-9	S	10/25/2005	VANADIUM	4.6E-01		1	1
KM-9	S	5/15/2006	VANADIUM	4.2E-01		1	1
KM-9	S	10/23/2006	VANADIUM	4.0E-01		1	1
KM-9	S	5/14/2007	VANADIUM	4.1E-01		1	1
KM-9	S	10/15/2007	VANADIUM	4.5E-01		1	1
KM-9	S	5/5/2008	VANADIUM	4.3E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-13
Well Type: S
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.22

Confidence in Trend: 100.0%

Ln Slope: -1.6E-04

LR Concentration Trend: D

Consolidation Data Table:

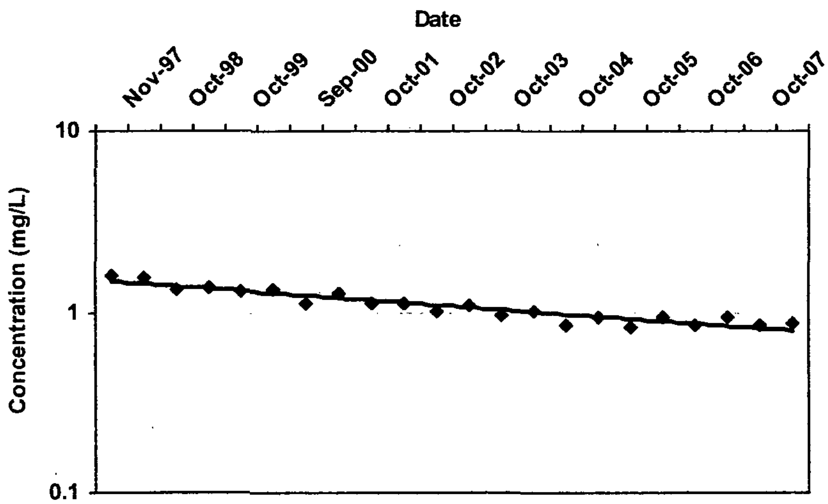
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-13	S	11/20/1997	VANADIUM	9.7E-01		1	1
KM-13	S	5/5/1998	VANADIUM	8.3E-01		1	1
KM-13	S	10/27/1998	VANADIUM	8.4E-01		1	1
KM-13	S	5/4/1999	VANADIUM	8.3E-01		1	1
KM-13	S	10/5/1999	VANADIUM	7.3E-01		1	1
KM-13	S	5/8/2000	VANADIUM	7.3E-01		1	1
KM-13	S	9/25/2000	VANADIUM	5.9E-01		1	1
KM-13	S	4/27/2001	VANADIUM	6.7E-01		1	1
KM-13	S	10/26/2001	VANADIUM	6.2E-01		1	1
KM-13	S	5/31/2002	VANADIUM	6.0E-01		1	1
KM-13	S	10/18/2002	VANADIUM	6.5E-01		1	1
KM-13	S	5/30/2003	VANADIUM	5.7E-01		1	1
KM-13	S	10/23/2003	VANADIUM	5.7E-01		1	1
KM-13	S	5/3/2004	VANADIUM	5.5E-01		1	1
KM-13	S	10/13/2004	VANADIUM	5.4E-01		1	1
KM-13	S	5/3/2005	VANADIUM	5.1E-01		1	1
KM-13	S	10/25/2005	VANADIUM	5.1E-01		1	1
KM-13	S	5/15/2006	VANADIUM	5.6E-01		1	1
KM-13	S	10/23/2006	VANADIUM	5.0E-01		1	1
KM-13	S	5/14/2007	VANADIUM	5.2E-01		1	1
KM-13	S	10/15/2007	VANADIUM	4.9E-01		1	1
KM-13	S	5/5/2008	VANADIUM	4.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - *Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect*

MAROS Linear Regression Statistics

Well: KM-15
Well Type: T
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.21

Confidence in Trend: 100.0%

Ln Slope: -1.6E-04

LR Concentration Trend: D

Consolidation Data Table:

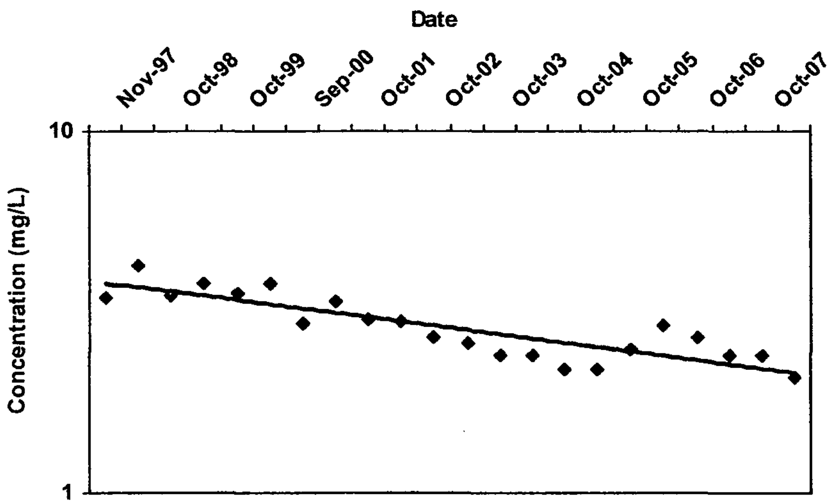
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-15	T	11/20/1997	VANADIUM	1.6E+00		1	1
KM-15	T	5/5/1998	VANADIUM	1.6E+00		1	1
KM-15	T	10/27/1998	VANADIUM	1.4E+00		1	1
KM-15	T	5/4/1999	VANADIUM	1.4E+00		1	1
KM-15	T	10/5/1999	VANADIUM	1.3E+00		1	1
KM-15	T	5/8/2000	VANADIUM	1.3E+00		1	1
KM-15	T	9/25/2000	VANADIUM	1.1E+00		1	1
KM-15	T	4/27/2001	VANADIUM	1.3E+00		1	1
KM-15	T	10/26/2001	VANADIUM	1.1E+00		1	1
KM-15	T	5/31/2002	VANADIUM	1.1E+00		1	1
KM-15	T	10/18/2002	VANADIUM	1.0E+00		1	1
KM-15	T	5/30/2003	VANADIUM	1.1E+00		1	1
KM-15	T	10/23/2003	VANADIUM	9.6E-01		1	1
KM-15	T	5/3/2004	VANADIUM	1.0E+00		1	1
KM-15	T	10/13/2004	VANADIUM	8.5E-01		1	1
KM-15	T	5/3/2005	VANADIUM	9.3E-01		1	1
KM-15	T	10/25/2005	VANADIUM	8.3E-01		1	1
KM-15	T	5/15/2006	VANADIUM	9.5E-01		1	1
KM-15	T	10/23/2006	VANADIUM	8.5E-01		1	1
KM-15	T	5/14/2007	VANADIUM	9.4E-01		1	1
KM-15	T	10/15/2007	VANADIUM	8.5E-01		1	1
KM-15	T	5/5/2008	VANADIUM	8.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - *Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect*

MAROS Linear Regression Statistics

Well: KM-16
Well Type: T
COC: VANADIUM

Time Period: 10/10/1997 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.21

Confidence in Trend: 100.0%

Ln Slope: -1.5E-04

LR Concentration Trend: D

Consolidation Data Table:

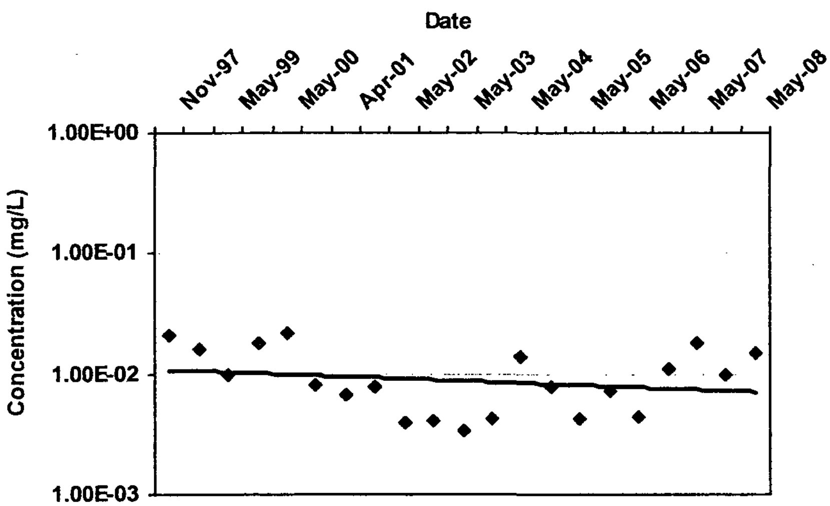
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-16	T	11/20/1997	VANADIUM	3.5E+00		1	1
KM-16	T	5/5/1998	VANADIUM	4.3E+00		1	1
KM-16	T	10/27/1998	VANADIUM	3.5E+00		1	1
KM-16	T	5/4/1999	VANADIUM	3.8E+00		1	1
KM-16	T	10/5/1999	VANADIUM	3.6E+00		1	1
KM-16	T	5/8/2000	VANADIUM	3.8E+00		1	1
KM-16	T	9/25/2000	VANADIUM	2.9E+00		1	1
KM-16	T	4/27/2001	VANADIUM	3.4E+00		1	1
KM-16	T	10/26/2001	VANADIUM	3.0E+00		1	1
KM-16	T	5/31/2002	VANADIUM	3.0E+00		1	1
KM-16	T	10/18/2002	VANADIUM	2.7E+00		1	1
KM-16	T	5/30/2003	VANADIUM	2.6E+00		1	1
KM-16	T	10/23/2003	VANADIUM	2.4E+00		1	1
KM-16	T	5/3/2004	VANADIUM	2.4E+00		1	1
KM-16	T	10/13/2004	VANADIUM	2.2E+00		1	1
KM-16	T	5/3/2005	VANADIUM	2.2E+00		1	1
KM-16	T	10/25/2005	VANADIUM	2.5E+00		1	1
KM-16	T	5/15/2006	VANADIUM	2.9E+00		1	1
KM-16	T	10/23/2006	VANADIUM	2.7E+00		1	1
KM-16	T	5/14/2007	VANADIUM	2.4E+00		1	1
KM-16	T	10/15/2007	VANADIUM	2.4E+00		1	1
KM-16	T	5/5/2008	VANADIUM	2.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-17
Well Type: T
COC: VANADIUM

Time Period: 10/10/1997 to 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.58

Confidence in Trend: 83.5%

Ln Slope: -1.2E-04

LR Concentration Trend: S

Consolidation Data Table:

Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-17	T	11/20/1997	VANADIUM	2.1E-02		1	1
KM-17	T	10/27/1998	VANADIUM	1.7E-02		1	1
KM-17	T	5/4/1999	VANADIUM	9.8E-03		1	1
KM-17	T	10/5/1999	VANADIUM	1.9E-02		1	1
KM-17	T	5/8/2000	VANADIUM	2.2E-02		1	1
KM-17	T	9/25/2000	VANADIUM	8.2E-03		1	1
KM-17	T	4/27/2001	VANADIUM	6.8E-03		1	1
KM-17	T	10/26/2001	VANADIUM	7.8E-03		1	1
KM-17	T	5/31/2002	VANADIUM	4.0E-03		1	1
KM-17	T	10/18/2002	VANADIUM	4.1E-03		1	1
KM-17	T	5/30/2003	VANADIUM	3.4E-03		1	1
KM-17	T	10/23/2003	VANADIUM	4.2E-03		1	1
KM-17	T	5/3/2004	VANADIUM	1.4E-02		1	1
KM-17	T	10/13/2004	VANADIUM	8.0E-03		1	1
KM-17	T	5/3/2005	VANADIUM	4.3E-03		1	1
KM-17	T	10/25/2005	VANADIUM	7.4E-03		1	1
KM-17	T	5/15/2006	VANADIUM	4.4E-03		1	1
KM-17	T	10/23/2006	VANADIUM	1.1E-02		1	1
KM-17	T	5/14/2007	VANADIUM	1.8E-02		1	1
KM-17	T	10/15/2007	VANADIUM	1.0E-02		1	1
KM-17	T	5/5/2008	VANADIUM	1.5E-02		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

APPENDIX B

MAROS Reports 1997 – 2008 Yearly Consolidation

APPENDIX B
TABLE OF CONTENTS

MAROS COC Assessment

Project: Tronox V Mo 13 wells Finch **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Toxicity:

Contaminant of Concern	Representative Concentration (mg/L)	PRG (mg/L)	Percent Above PRG
MOLYBDENUM	6.2E+00	1.8E-01	3347.7%
VANADIUM	3.6E+00	2.6E-01	1301.9%

Note: Top COCs by toxicity were determined by examining a representative concentration for each compound over the entire site. The compound representative concentrations are then compared with the chosen PRG for that compound, with the percentage excedence from the PRG determining the compound's toxicity. All compounds above exceed the PRG.

Prevalence:

Contaminant of Concern	Class	Total Wells	Total Excedences	Percent Excedences	Total detects
MOLYBDENUM	MET	14	13	92.9%	14
VANADIUM	MET	14	11	78.6%	14

Note: Top COCs by prevalence were determined by examining a representative concentration for each well location at the site. The total excedences (values above the chosen PRGs) are compared to the total number of wells to determine the prevalence of the compound.

Mobility:

Contaminant of Concern	Kd
MOLYBDENUM	20
VANADIUM	1000

Note: Top COCs by mobility were determined by examining each detected compound in the dataset and comparing their mobilities (Koc's for organics, assume foc = 0.001, and Kd's for metals).

Contaminants of Concern (COC's)

MOLYBDENUM

VANADIUM

MAROS Mann-Kendall Statistics Summary

Project: Tronox V Mo 13 wells Finch **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
MOLYBDENUM								
KM-3	S	12	12	0.64	-42	99.8%	No	D
KM-9	S	12	12	0.30	-41	99.8%	No	D
KM-13	S	12	12	0.73	-64	100.0%	No	D
KM-8	S	12	12	0.43	-48	100.0%	No	D
KM-7	S	9	9	0.12	-28	99.9%	No	D
KM-6	S	12	12	0.26	-39	99.7%	No	D
KM-5	S	12	12	0.38	-43	99.9%	No	D
KM-17	S	12	12	0.22	-24	94.2%	No	PD
KM-4	S	12	12	0.86	-62	100.0%	No	D
KM-2	S	12	12	1.11	-56	100.0%	No	D
KM-15	T	12	12	0.57	-58	100.0%	No	D
KM-16	T	12	12	0.36	-48	100.0%	No	D
Finch Spring	T	12	12	0.41	-64	100.0%	No	D
VANADIUM								
KM-13	S	12	12	0.24	-64	100.0%	No	D
KM-17	S	12	12	0.50	-20	90.2%	No	PD
KM-3	S	12	12	0.30	-12	77.0%	No	S
KM-9	S	12	12	0.31	-60	100.0%	No	D
KM-4	S	12	12	0.56	-22	92.4%	No	PD
KM-5	S	12	12	0.29	-57	100.0%	No	D
KM-6	S	12	12	0.18	-32	98.4%	No	D
KM-7	S	9	9	0.11	-20	97.8%	No	D
KM-8	S	12	12	0.38	14	81.0%	No	NT
KM-2	S	12	12	0.32	-42	99.8%	No	D
KM-16	T	12	12	0.21	-50	100.0%	No	D
KM-15	T	12	12	0.22	-62	100.0%	No	D
Finch Spring	T	12	12	0.22	20	90.2%	No	PI

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Linear Regression Statistics Summary

Project: Tronox V Mo 13 wells Finch

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Time Period: 10/1/1997 **to** 5/10/2008

Consolidation Period: Yearly

Consolidation Type: Geometric Mean

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Average Conc (mg/L)	Median Conc (mg/L)	Standard Deviation	All Samples "ND" ?	Ln Slope	Coefficient of Variation	Confidence in Trend	Concentration Trend
MOLYBDENUM									
KM-9	S	2.1E-01	2.0E-01	6.3E-02	No	-1.6E-04	0.30	99.9%	D
KM-5	S	2.4E-01	2.0E-01	9.2E-02	No	-2.0E-04	0.38	99.9%	D
KM-13	S	5.5E-01	4.3E-01	4.0E-01	No	-4.4E-04	0.73	100.0%	D
KM-3	S	9.7E+00	7.2E+00	6.2E+00	No	-2.4E-04	0.64	99.7%	D
KM-7	S	4.4E-01	4.4E-01	5.5E-02	No	-1.0E-04	0.12	99.6%	D
KM-4	S	5.5E+00	3.2E+00	4.7E+00	No	-4.9E-04	0.86	100.0%	D
KM-2	S	2.7E+00	2.0E+00	2.9E+00	No	-4.2E-04	1.11	100.0%	D
KM-6	S	1.6E+00	1.5E+00	4.3E-01	No	-1.5E-04	0.26	99.9%	D
KM-17	S	5.2E-01	5.0E-01	1.1E-01	No	-8.4E-05	0.22	94.9%	PD
KM-8	S	5.7E+01	5.2E+01	2.5E+01	No	-2.8E-04	0.43	100.0%	D
Finch Spring	T	3.3E-01	2.8E-01	1.3E-01	No	-2.9E-04	0.41	100.0%	D
KM-15	T	7.0E-01	5.4E-01	4.0E-01	No	-3.1E-04	0.57	100.0%	D
KM-16	T	1.1E+00	9.9E-01	4.0E-01	No	-2.4E-04	0.36	100.0%	D
VANADIUM									
KM-17	S	1.1E-02	1.2E-02	5.4E-03	No	-1.3E-04	0.50	82.9%	S
KM-2	S	6.5E+00	6.2E+00	2.1E+00	No	-2.1E-04	0.32	100.0%	D
KM-3	S	3.0E+00	2.8E+00	9.2E-01	No	-7.1E-05	0.30	87.4%	S
KM-13	S	6.4E-01	6.0E-01	1.5E-01	No	-1.7E-04	0.24	100.0%	D
KM-4	S	7.9E+00	6.1E+00	4.4E+00	No	-2.1E-04	0.56	98.4%	D
KM-6	S	4.6E+00	4.6E+00	8.3E-01	No	-8.5E-05	0.18	98.5%	D
KM-7	S	2.4E+00	2.3E+00	2.5E-01	No	-7.0E-05	0.11	98.2%	D
KM-8	S	1.8E+01	1.9E+01	6.9E+00	No	1.8E-04	0.38	96.5%	I
KM-9	S	6.1E-01	5.8E-01	1.9E-01	No	-2.2E-04	0.31	100.0%	D
KM-5	S	1.6E+00	1.4E+00	4.6E-01	No	-1.9E-04	0.29	100.0%	D
KM-16	T	2.9E+00	2.8E+00	6.0E-01	No	-1.4E-04	0.21	100.0%	D
Finch Spring	T	5.8E-02	6.0E-02	1.3E-02	No	1.1E-04	0.22	97.7%	I
KM-15	T	1.1E+00	1.0E+00	2.5E-01	No	-1.6E-04	0.22	100.0%	D

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); COV = Coefficient of Variation

MAROS Plume Analysis Summary

Project: Tronox V Mo 13 wells Finch

Location: Soda Springs

User Name: Global Environmental

State: Idaho

Time Period: 10/1/1997 **to** 5/10/2008

Consolidation Period: Yearly

Consolidation Type: Geometric Mean

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Constituent	Well	Source/ Tail	Number of Samples	Number of Detects	Average (mg/L)	Median (mg/L)	All Samples "ND" ?	Mann-Kendall	Linear Regression	Modeling	Empirical
MOLYBDENUM											
	KM-3	S	12	12	9.7E+00	7.2E+00	No	D	D	N/A	N/A
	KM-9	S	12	12	2.1E-01	2.0E-01	No	D	D	N/A	N/A
	KM-13	S	12	12	5.5E-01	4.3E-01	No	D	D	N/A	N/A
	KM-8	S	12	12	5.7E+01	5.2E+01	No	D	D	N/A	N/A
	KM-7	S	9	9	4.4E-01	4.4E-01	No	D	D	N/A	N/A
	KM-6	S	12	12	1.6E+00	1.5E+00	No	D	D	N/A	N/A
	KM-5	S	12	12	2.4E-01	2.0E-01	No	D	D	N/A	N/A
	KM-17	S	12	12	5.2E-01	5.0E-01	No	PD	PD	N/A	N/A
	KM-4	S	12	12	5.5E+00	3.2E+00	No	D	D	N/A	N/A
	KM-2	S	12	12	2.7E+00	2.0E+00	No	D	D	N/A	N/A
	KM-15	T	12	12	7.0E-01	5.4E-01	No	D	D	N/A	N/A
	KM-16	T	12	12	1.1E+00	9.9E-01	No	D	D	N/A	N/A
	Finch Spring	T	12	12	3.3E-01	2.8E-01	No	D	D	N/A	N/A
VANADIUM											
	KM-13	S	12	12	6.4E-01	6.0E-01	No	D	D	N/A	N/A
	KM-17	S	12	12	1.1E-02	1.2E-02	No	PD	S	N/A	N/A
	KM-3	S	12	12	3.0E+00	2.8E+00	No	S	S	N/A	N/A
	KM-9	S	12	12	6.1E-01	5.8E-01	No	D	D	N/A	N/A
	KM-4	S	12	12	7.9E+00	6.1E+00	No	PD	D	N/A	N/A
	KM-5	S	12	12	1.6E+00	1.4E+00	No	D	D	N/A	N/A
	KM-6	S	12	12	4.6E+00	4.6E+00	No	D	D	N/A	N/A

Project: Tronox V Mo 13 wells Finch **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Constituent	Well	Source/ Tail	Number of Samples	Number of Detects	Average (mg/L)	Median (mg/L)	All Samples "ND" ?	Mann-Kendall	Linear Regression	Modeling	Empirical
VANADIUM											
	KM-7	S	9	9	2.4E+00	2.3E+00	No	D	D	N/A	N/A
	KM-8	S	12	12	1.8E+01	1.9E+01	No	NT	I	N/A	N/A
	KM-2	S	12	12	6.5E+00	6.2E+00	No	D	D	N/A	N/A
	KM-16	T	12	12	2.9E+00	2.8E+00	No	D	D	N/A	N/A
	KM-15	T	12	12	1.1E+00	1.0E+00	No	D	D	N/A	N/A
	Finch Spring	T	12	12	5.8E-02	6.0E-02	No	PI	I	N/A	N/A

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Spatial Moment Analysis Summary

Project: Tronox V Mo 13 wells Finch

Location: Soda Springs

User Name: Global Environmental

State: Idaho

Effective Date	0th Moment Estimated Mass (Kg)	1st Moment (Center of Mass) Xc (ft)	Yc (ft)	Source Distance (ft)	2nd Moment (Spread) Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
MOLYBDENUM							
7/1/1997	1.7E+04	658,948	371,066	1,361	416,438	934,664	12
7/1/1998	1.3E+04	658,845	371,077	1,412	366,735	931,172	12
7/1/1999	1.2E+04	658,831	371,045	1,446	348,266	921,983	12
7/1/2000	1.0E+04	658,812	370,947	1,536	338,502	934,069	13
7/1/2001	9.3E+03	658,802	370,904	1,577	337,814	948,110	13
7/1/2002	8.5E+03	658,828	370,936	1,536	346,632	939,381	13
7/1/2003	7.6E+03	658,840	370,921	1,541	348,701	953,440	13
7/1/2004	7.0E+03	658,839	370,954	1,514	349,386	953,830	13
7/1/2005	6.8E+03	658,818	370,978	1,507	345,268	927,098	13
7/1/2006	6.5E+03	658,789	370,987	1,517	337,086	912,925	13
7/1/2007	5.9E+03	658,811	371,002	1,492	344,802	911,562	13
7/1/2008	5.8E+03	658,795	371,013	1,493	341,124	911,775	13
VANADIUM							
7/1/1997	1.1E+04	658,898	371,723	933	364,272	404,774	12
7/1/1998	1.0E+04	658,859	371,708	974	349,730	427,430	12
7/1/1999	9.4E+03	658,859	371,691	983	359,394	447,267	12
7/1/2000	8.9E+03	658,762	371,636	1,095	348,452	452,621	13
7/1/2001	8.0E+03	658,730	371,638	1,121	347,063	436,829	13
7/1/2002	7.7E+03	658,732	371,685	1,096	355,676	370,077	13
7/1/2003	7.0E+03	658,723	371,677	1,108	346,758	387,384	13
7/1/2004	7.2E+03	658,726	371,629	1,129	336,229	453,869	13
7/1/2005	6.5E+03	658,735	371,663	1,104	337,312	410,527	13
7/1/2006	7.5E+03	658,763	371,691	1,066	317,813	388,207	13
7/1/2007	7.3E+03	658,766	371,629	1,095	331,031	464,006	13
7/1/2008	7.1E+03	658,802	371,621	1,068	343,745	486,609	13

Project: Tronox V Mo 13 wells Finch

Location: Soda Springs

User Name: Global Environmental

State: Idaho

Moment Type	Constituent	Coefficient of Variation	Mann-Kendall S Statistic	Confidence in Trend	Moment Trend
Zeroth Moment: Mass					
	MOLYBDENUM	0.37	-66	100.0%	D
	VANADIUM	0.17	-48	100.0%	D
1st Moment: Distance to Source					
	MOLYBDENUM	0.04	8	68.1%	NT
	VANADIUM	0.06	18	87.5%	NT
2nd Moment: Sigma XX					
	MOLYBDENUM	0.06	-28	96.9%	D
	VANADIUM	0.04	-46	100.0%	D
2nd Moment: Sigma YY					
	MOLYBDENUM	0.02	-16	84.5%	S
	VANADIUM	0.08	18	87.5%	NT

Note: The following assumptions were applied for the calculation of the Zeroth Moment:

Porosity: 0.20 **Saturated Thickness:** Uniform: 200 ft

Mann-Kendall Trend test performed on all sample events for each constituent. Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events).

Note: The Sigma XX and Sigma YY components are estimated using the given field coordinate system and then rotated to align with the estimated groundwater flow direction. Moments are not calculated for sample events with less than 6 wells.

MAROS Site Results

Project: Tronox 13 wells Finch yearly **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

User Defined Site and Data Assumptions:

Hydrogeology and Plume Information:

Groundwater Seepage Velocity: 5475 ft/yr

Current Plume Length: 6000 ft

Current Plume Width 3500 ft

Number of Tail Wells: 3

Number of Source Wells: 11

Down-gradient Information:

Distance from Edge of Tail to Nearest:

Down-gradient receptor: -700 ft

Down-gradient property: -2000 ft

Distance from Source to Nearest:

Down-gradient receptor: 5300 ft

Down-gradient property: 4000 ft

Source Information:

Source Treatment: No Current Site Treatment

NAPL is not observed at this site.

Data Consolidation Assumptions:

Time Period: 10/1/1997 **to** 5/30/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value

Plume Information Weighting Assumptions:

Consolidation Step 1. Weight Plume Information by Chemical
Summary Weighting: Weighting Applied to All Chemicals Equally
Consolidation Step 2. Weight Well Information by Chemical
Well Weighting: No Weighting of Wells was Applied.
Chemical Weighting: No Weighting of Chemicals was Applied.

Note: These assumptions were made when consolidating the historical montoring data and lumping the Wells and COCs.

1. Compliance Monitoring/Remediation Optimization Results:

Preliminary Monitoring System Optimization Results: Based on site classification, source treatment and Monitoring System Category the following suggestions are made for site Sampling Frequency, Duration of Sampling before reassessment, and Well Density. These criteria take into consideration: Plume Stability, Type of Plume, and Groundwater Velocity.

COC	Tail Stability	Source Stability	Level of Effort	Sampling Duration	Sampling Frequency	Sampling Density
MOLYBDENUM	D	D	L	End Sampling	Close site	> 50
VANADIUM	PD	PD	L	Sample 1 more year	Biannually (6 months)	> 50

Note:

Plume Status: (I) Increasing; (PI)Probably Increasing; (S) Stable; (NT) No Trend; (PD) Probably Decreasing; (D) Decreasing

Design Categories: (E) Extensive; (M) Moderate; (L) Limited (N/A) Not Applicable, Insufficient Data Available

Level of Monitoring Effort Indicated by Analysi Limited

2. Spatial Moment Analysis Results:

Moment Type	Constituent	Coefficient of Variation	Mann-Kendall S Statistic	Confidence in Trend	Moment Trend
Zeroth Moment: Mass					
	MOLYBDENUM	0.37	-66	100.0%	D
	VANADIUM	0.17	-48	100.0%	D
1st Moment: Distance to Source					
	MOLYBDENUM	0.04	8	68.1%	NT
	VANADIUM	0.06	18	87.5%	NT
2nd Moment: Sigma XX					
	MOLYBDENUM	0.06	-28	96.9%	D
	VANADIUM	0.04	-46	100.0%	D
2nd Moment: Sigma YY					
	MOLYBDENUM	0.02	-16	84.5%	S
	VANADIUM	0.08	18	87.5%	NT

Note: The following assumptions were applied for the calculation of the Zeroth Moment:

Porosity: 0.20 **Saturated Thickness:** Uniform: 200 ft

Mann-Kendall Trend test performed on all sample events for each constituent. Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events).

MAROS Sampling Location Optimization Results

Project: Tronox 13 wells Finch yearly

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Sampling Events Analyzed: From Fall 97 (11/20/1997) to Spring 08 (5/5/2008)

Parameters used:

Constituent	Inside SF	Hull SF	Area Ratio	Conc. Ratio
MOLYBDENUM	0.1	0.01	0.95	0.95
VANADIUM	0.1	0.01	0.95	0.95

Well	X (feet)	Y (feet)	Removable?	Average Slope Factor*	Minimum Slope Factor*	Maximum Slope Factor*	Eliminated?
MOLYBDENUM							
Finch Spring	658191.88	367132.03	☑	0.521	0.219	0.637	☐
KM-13	658042.50	372185.75	☑	0.532	0.308	0.802	☐
KM-15	657491.88	370332.03	☑	0.110	0.044	0.208	☐
KM-16	658151.13	371058.75	☑	0.169	0.044	0.238	☐
KM-17	659365.31	371100.34	☑	0.463	0.360	0.646	☐
KM-2	660379.19	371777.03	☑	0.111	0.013	0.256	☐
KM-3	659825.56	371745.66	☑	0.307	0.200	0.414	☐
KM-4	659695.19	372033.81	☑	0.187	0.073	0.290	☐
KM-5	658856.63	372710.72	☑	0.644	0.384	0.736	☐
KM-6	658601.63	371736.94	☑	0.147	0.024	0.224	☐
KM-7	658578.44	372113.19	☑	0.469	0.357	0.586	☐
KM-8	658144.19	371771.97	☑	0.739	0.639	0.795	☐
KM-9	657836.25	371770.47	☑	0.853	0.762	0.922	☐
VANADIUM							
Finch Spring	658191.88	367132.03	☑	0.293	0.055	0.786	☐
KM-13	658042.50	372185.75	☑	0.241	0.162	0.316	☐
KM-15	657491.88	370332.03	☑	0.204	0.022	0.276	☐
KM-16	658151.13	371058.75	☑	0.116	0.078	0.165	☐
KM-17	659365.31	371100.34	☑	0.843	0.727	1.000	☐
KM-2	660379.19	371777.03	☑	0.210	0.102	0.285	☐
KM-3	659825.56	371745.66	☑	0.081	0.010	0.235	☑
KM-4	659695.19	372033.81	☑	0.190	0.116	0.274	☐
KM-5	658856.63	372710.72	☑	0.063	0.019	0.105	☐
KM-6	658601.63	371736.94	☑	0.094	0.032	0.169	☑
KM-7	658578.44	372113.19	☑	0.045	0.021	0.072	☑
KM-8	658144.19	371771.97	☑	0.295	0.170	0.388	☐

Project: Tronox 13 wells Finch yearly

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Well	X (feet)	Y (feet)	Removable?	Average Slope Factor*	Minimum Slope Factor*	Maximum Slope Factor*	Eliminated?
KM-9	657836.25	371770.47	☑	0.333	0.221	0.444	☐

Note: The Slope Factor indicates the relative importance of a well in the monitoring network at a given sampling event; the larger the SF value of a well, the more important the well is and vice versa; the Average Slope Factor measures the overall well importance in the selected time period; the state coordinates system (i.e., X and Y refer to Easting and Northing respectively) or local coordinates systems may be used; wells that are NOT selected for analysis are not shown above.
* When the report is generated after running the Excel module, SF values will NOT be shown above.

MAROS Sampling Location Optimization

Results by Considering All COCs

Project: Tronox 13 wells Finch yearly

User Name: Global Environmental

Location: Ŝoda Springs

State: Idaho

Sampling Events Analyzed: **From** Fall 97 11/20/1997 **to** Spring 08 5/5/2008

Well	X (feet)	Y (feet)	Number of COCs	COC-Averaged Slope Factor*	Abandoned?
Finch Spring	658191.88	367132.03	2	0.407	☐
KM-13	658042.50	372185.75	2	0.387	☐
KM-15	657491.88	370332.03	2	0.157	☐
KM-16	658151.13	371058.75	2	0.142	☐
KM-17	659365.31	371100.34	2	0.653	☐
KM-2	660379.19	371777.03	2	0.160	☐
KM-3	659825.56	371745.66	2	0.194	☐
KM-4	659695.19	372033.81	2	0.189	☐
KM-5	658856.63	372710.72	2	0.353	☐
KM-6	658601.63	371736.94	2	0.121	☐
KM-7	658578.44	372113.19	2	0.257	☐
KM-8	658144.19	371771.97	2	0.517	☐
KM-9	657836.25	371770.47	2	0.593	☐

Note: the COC-Averaged Slope Factor is the value calculated by averaging those "Average Slope Factor" obtained earlier across COCs; to be conservative, a location is "abandoned" only when it is eliminated from all COCs; "abandoned" doesn't necessarily mean the abandon of well, it can mean that NO samples need to be collected for any COCs.
* When the report is generated after running the Excel module, SF values will NOT be shown above.

MAROS Sampling Frequency Optimization Results

Project: Tronox 13 wells Finch yearly

User Name: Global Environmental

Location: Soda Springs

State: Idaho

The Overall Number of Sampling Events: 22

"Recent Period" defined by events: **From** Fall 97 11/20/1997 **To** Spring 08 5/5/2008

"Rate of Change" parameters used:

Constituent	Cleanup Goal	Low Rate	Medium Rate	High Rate
MOLYBDENUM	0.18	0.09	0.18	0.36
VANADIUM	0.26	0.13	0.26	0.52

Units: Cleanup Goal is in mg/L; all rate parameters are in mg/L/year.

Well	Recommended Sampling Frequency	Frequency Based on Recent Data	Frequency Based on Overall Data
MOLYBDENUM			
Finch Spring	Annual	Annual	Annual
KM-13	Annual	Annual	Annual
KM-15	Annual	Annual	Annual
KM-16	Annual	Annual	Annual
KM-17	Annual	Annual	Annual
KM-2	Annual	Annual	Annual
KM-3	Annual	Annual	Annual
KM-4	Annual	Annual	Annual
KM-5	Annual	Annual	Annual
KM-6	Annual	Annual	Annual
KM-7	Annual	Annual	Annual
KM-8	Annual	Annual	Annual
KM-9	Annual	Annual	Annual
VANADIUM			
Finch Spring	Biennial	Annual	Annual
KM-13	Annual	Annual	Annual
KM-15	Annual	Annual	Annual
KM-16	Annual	Annual	Annual
KM-17	Biennial	Annual	Annual
KM-2	Annual	Annual	Annual
KM-3	Annual	Annual	Annual
KM-4	Annual	Annual	Annual
KM-5	Annual	Annual	Annual

Project: Tronox 13 wells Finch yearly

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Well	Recommended Sampling Frequency	Frequency Based on Recent Data	Frequency Based on Overall Data
KM-6	Annual	Annual	Annual
KM-7	Annual	Annual	Annual
KM-8	Quarterly	Quarterly	Quarterly
KM-9	Annual	Annual	Annual

Note: Sampling frequency is determined considering both recent and overall concentration trends. Sampling Frequency is the final recommendation; Frequency Based on Recent Data is the frequency determined using recent (short) period of monitoring data; Frequency Based on Overall Data is the frequency determined using overall (long) period of monitoring data. If the "recent period" is defined using a different series of sampling events, the results could be different.

MAROS Power Analysis for Individual Well Cleanup Status

Project: Tronox 13 wells Finch yearly

User Name: Global Environmental

Location: Soda Springs

State: Idaho

From Period: 7/9/1997 **to** 5/5/2008

Well	Sample Size	Sample Mean	Sample Stdev.	Normal Distribution Assumption Cleanup Status	Lognormal Distribution Assumption Cleanup Status	Alpha Level	Expected Power
MOLYBDENUM			Cleanup Goal (mg/L) = 0.18		Target Level (mg/L) = 0.144		
Finch Spring	12	3.26E-01	1.32E-01	Not Attained	Not Attained	0.05	0.8
KM-13	12	5.54E-01	4.03E-01	Cont Sampling	Not Attained	0.05	0.8
KM-15	12	7.07E-01	4.00E-01	Cont Sampling	Not Attained	0.05	0.8
KM-16	12	1.13E+00	4.13E-01	Cont Sampling	Not Attained	0.05	0.8
KM-17	12	5.25E-01	1.15E-01	Not Attained	Not Attained	0.05	0.8
KM-2	12	2.67E+00	2.94E+00	Cont Sampling	Not Attained	0.05	0.8
KM-3	12	9.70E+00	6.24E+00	Cont Sampling	Not Attained	0.05	0.8
KM-4	12	5.51E+00	4.70E+00	Cont Sampling	Not Attained	0.05	0.8
KM-5	12	2.42E-01	9.23E-02	Not Attained	Not Attained	0.05	0.8
KM-6	12	1.64E+00	4.39E-01	Cont Sampling	Not Attained	0.05	0.8
KM-7	9	4.43E-01	5.48E-02	Not Attained	Not Attained	0.05	0.8
KM-8	12	5.76E+01	2.47E+01	Cont Sampling	Not Attained	0.05	0.8
KM-9	12	2.12E-01	6.29E-02	Not Attained	Not Attained	0.05	0.8
VANADIUM			Cleanup Goal (mg/L) = 0.26		Target Level (mg/L) = 0.208		
Finch Spring	12	5.82E-02	1.29E-02	Attained	Attained	0.05	0.8
KM-13	12	6.36E-01	1.54E-01	Not Attained	Not Attained	0.05	0.8
KM-15	12	1.12E+00	2.50E-01	Not Attained	Not Attained	0.05	0.8
KM-16	12	2.91E+00	6.00E-01	Cont Sampling	Not Attained	0.05	0.8
KM-17	12	1.13E-02	5.51E-03	Attained	Attained	0.05	0.8
KM-2	12	6.53E+00	2.07E+00	Cont Sampling	Not Attained	0.05	0.8
KM-3	12	3.08E+00	9.22E-01	Cont Sampling	Not Attained	0.05	0.8
KM-4	12	7.93E+00	4.44E+00	Cont Sampling	Not Attained	0.05	0.8
KM-5	12	1.58E+00	4.56E-01	Cont Sampling	Not Attained	0.05	0.8
KM-6	12	4.66E+00	8.38E-01	Cont Sampling	Not Attained	0.05	0.8
KM-7	9	2.37E+00	2.61E-01	Cont Sampling	Not Attained	0.05	0.8
KM-8	12	1.81E+01	6.90E+00	Cont Sampling	Not Attained	0.05	0.8
KM-9	12	6.13E-01	1.90E-01	Not Attained	Not Attained	0.05	0.8

Note: N/C refers to "not conducted" because of insufficient data (N<4); S/E indicates the sample mean significantly exceeds the cleanup level and thus no analysis is conducted; Sample Size is the number of concentration data in a sampling location that are used in the analysis; The Target Level is the expected mean concentration in wells after cleanup attainment, it is only used in individual well celanup status evaluation. The test for evaluating attainment status is from EPA (1992). Refer to Appendix A.6 of MAROS Manual for details.

Individual Well Cleanup Status - Optional Analysis Results

Project: Tronox 13 wells Finch yearly

User Name: Global Environmental

Location: Soda Springs

State: Idaho

From Period: 7/9/1997 **to** 5/5/2008

Well	Sample Size	Sample Mean	Sample Stdev.	Normal Distribution Assumption: Significantly < Cleanup Goal?	Normal: Power	Normal: Expected Sample Size	Lognormal Distribution Assumption: Significantly < Cleanup Goal?	Lognormal: Power	Lognormal: Expected Sample Size
MOLYBDENUM				Cleanup Goal (mg/L) = 0.18	Alpha Level = 0.05		Expected Power = 0.8		
Finch Spring	12	3.26E-01	1.32E-01	NO	S/E	S/E	NO	S/E	S/E
KM-13	12	5.54E-01	4.03E-01	NO	S/E	S/E	NO	S/E	S/E
KM-15	12	7.07E-01	4.00E-01	NO	S/E	S/E	NO	S/E	S/E
KM-16	12	1.13E+00	4.13E-01	NO	S/E	S/E	NO	S/E	S/E
KM-17	12	5.25E-01	1.15E-01	NO	S/E	S/E	NO	S/E	S/E
KM-2	12	2.67E+00	2.94E+00	NO	S/E	S/E	NO	S/E	S/E
KM-3	12	9.70E+00	6.24E+00	NO	S/E	S/E	NO	S/E	S/E
KM-4	12	5.51E+00	4.70E+00	NO	S/E	S/E	NO	S/E	S/E
KM-5	12	2.42E-01	9.23E-02	NO	S/E	S/E	NO	S/E	S/E
KM-6	12	1.64E+00	4.39E-01	NO	S/E	S/E	NO	S/E	S/E
KM-7	9	4.43E-01	5.48E-02	NO	S/E	S/E	NO	S/E	S/E
KM-8	12	5.76E+01	2.47E+01	NO	S/E	S/E	NO	S/E	S/E
KM-9	12	2.12E-01	6.29E-02	NO	S/E	S/E	NO	S/E	S/E
VANADIUM				Cleanup Goal (mg/L) = 0.26	Alpha Level = 0.05		Expected Power = 0.8		
Finch Spring	12	5.82E-02	1.29E-02	YES	1.000	<=3	YES	1.000	<=3
KM-13	12	6.36E-01	1.54E-01	NO	S/E	S/E	NO	S/E	S/E
KM-15	12	1.12E+00	2.50E-01	NO	S/E	S/E	NO	S/E	S/E
KM-16	12	2.91E+00	6.00E-01	NO	S/E	S/E	NO	S/E	S/E
KM-17	12	1.13E-02	5.51E-03	YES	1.000	<=3	YES	1.000	<=3
KM-2	12	6.53E+00	2.07E+00	NO	S/E	S/E	NO	S/E	S/E
KM-3	12	3.08E+00	9.22E-01	NO	S/E	S/E	NO	S/E	S/E
KM-4	12	7.93E+00	4.44E+00	NO	S/E	S/E	NO	S/E	S/E
KM-5	12	1.58E+00	4.56E-01	NO	S/E	S/E	NO	S/E	S/E
KM-6	12	4.66E+00	8.38E-01	NO	S/E	S/E	NO	S/E	S/E
KM-7	9	2.37E+00	2.61E-01	NO	S/E	S/E	NO	S/E	S/E
KM-8	12	1.81E+01	6.90E+00	NO	S/E	S/E	NO	S/E	S/E
KM-9	12	6.13E-01	1.90E-01	NO	S/E	S/E	NO	S/E	S/E

Note: N/C refers to "not conducted" because of insufficient data (N<4); S/E indicates the sample mean significantly exceeds the cleanup level and thus no analysis is conducted; Sample Size is the number of concentration data in a sampling location that are used in the power analysis; Expected Sample Size is the number of concentration data needed to reach the Expected Power under current sample variability; The Target Level is the expected mean concentration in wells after cleanup attainment, it is only used in individual well celanup status evaluation. The Student's t-test on mean difference is used in this analysis. Refer to Appendix A.6 of MAROS Manual for details.

MAROS Risk-Based Power Analysis for Site Cleanup

Project: Tronox 13 wells Finch yearly

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Parameters:

Groundwater Flow Direction: 240 degrees **Distance to Receptor:** -1300 feet

From Period: Fall 97 **to** Spring 08

11/20/1997 5/5/2008

Selected Plume Centerline Wells:

Well	Distance to Receptor (feet)
KM-15	1121.3
KM-16	2080.3
KM-8	2694.5

The distance is measured in the Groundwater Flow Angle from the well to the compliance boundary.

				Normal Distribution Assumption			Lognormal Distribution Assumption				
Sample Event	**Sample Size**	**Sample Mean**	**Sample Stdev.**	**Cleanup Status**	**Power**	**Expected Sample Size**	**Celanup Status**	**Power**	**Expected Sample Size**	**Alpha Level**	**Expected Power**
MOLYBDENUM				Cleanup Goal = 0.18							
Fall 97	12	1.14E+00	3.87E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 98	12	1.01E+00	3.40E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 98	12	1.33E+00	4.58E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 99	12	1.00E+00	3.42E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 99	12	1.19E+00	4.08E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 00	13	8.94E-01	3.19E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 00	13	9.75E-01	3.49E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 01	13	9.82E-01	3.52E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 01	13	1.14E+00	4.08E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 02	13	8.44E-01	3.02E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 02	13	8.16E-01	2.92E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 03	13	6.07E-01	2.17E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 03	13	6.53E-01	2.34E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 04	13	5.93E-01	2.12E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 04	13	4.98E-01	1.77E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 05	13	5.86E-01	2.09E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 05	13	3.75E-01	1.33E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 06	13	2.74E-01	9.44E-01	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 06	13	4.17E-01	1.48E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 07	13	4.73E-01	1.69E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 07	13	5.08E-01	1.82E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 08	13	5.97E-01	2.14E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
VANADIUM				Cleanup Goal = 0.26							
Fall 97	12	2.14E-01	1.83E-01	Not Attained	0.212	99	Not Attained	S/E	S/E	0.05	0.8

Project: Tronox 13 wells Finch yearly **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Sample Event	Sample Szie	Sample Mean	Sample Stdev.	Normal Distribution Assumption: Cleanup Status	Normal Distribution Assumption: Power	Normal Distribution Assumption: Expected Sample Size	Lognormal Distribution Assumption: Celanup Status	Lognormal Distribution Assumption: Power	Lognormal Distribution Assumption: Expected Sample Size	Alpha Level	Expected Power
VANADIUM				Cleanup Goal = 0.26							
Spring 98	11	2.19E-01	1.81E-01	Not Attained	0.181	>100	Not Attained	0.061	>100	0.05	0.8
Fall 98	12	1.70E-01	1.44E-01	Attained	0.679	17	Not Attained	S/E	S/E	0.05	0.8
Spring 99	12	1.91E-01	1.57E-01	Not Attained	0.435	33	Not Attained	S/E	S/E	0.05	0.8
Fall 99	12	1.28E-01	1.27E-01	Attained	0.968	7	Not Attained	S/E	S/E	0.05	0.8
Spring 00	13	9.41E-02	1.71E-01	Attained	0.960	8	Not Attained	0.131	>100	0.05	0.8
Fall 00	13	7.73E-02	1.42E-01	Attained	0.998	5	Not Attained	0.106	>100	0.05	0.8
Spring 01	13	9.29E-02	1.60E-01	Attained	0.977	7	Not Attained	S/E	S/E	0.05	0.8
Fall 01	13	1.11E-01	2.85E-01	Attained	0.573	24	Not Attained	S/E	S/E	0.05	0.8
Spring 02	13	8.73E-02	1.99E-01	Attained	0.919	9	Not Attained	S/E	S/E	0.05	0.8
Fall 02	13	9.43E-02	2.57E-01	Attained	0.729	16	Not Attained	S/E	S/E	0.05	0.8
Spring 03	13	8.20E-02	1.81E-01	Attained	0.964	8	Not Attained	S/E	S/E	0.05	0.8
Fall 03	13	1.07E-01	3.07E-01	Attained	0.540	26	Not Attained	S/E	S/E	0.05	0.8
Spring 04	13	8.87E-02	2.30E-01	Attained	0.832	12	Not Attained	0.155	>100	0.05	0.8
Fall 04	13	9.94E-02	2.98E-01	Attained	0.597	22	Not Attained	0.090	>100	0.05	0.8
Spring 05	13	7.68E-02	1.66E-01	Attained	0.987	6	Not Attained	0.075	>100	0.05	0.8
Fall 05	13	7.91E-02	2.06E-01	Attained	0.924	9	Not Attained	0.125	>100	0.05	0.8
Spring 06	13	7.52E-02	1.31E-01	Attained	1.000	4	Not Attained	0.057	>100	0.05	0.8
Fall 06	13	7.29E-02	1.72E-01	Attained	0.985	7	Not Attained	0.177	>100	0.05	0.8
Spring 07	13	7.55E-02	1.65E-01	Attained	0.989	6	Not Attained	0.252	81	0.05	0.8
Fall 07	13	8.08E-02	2.12E-01	Attained	0.907	10	Not Attained	0.152	>100	0.05	0.8
Spring 08	13	7.75E-02	1.76E-01	Attained	0.976	7	Not Attained	0.237	89	0.05	0.8

Note: #N/C means "not conducted" due to a small sample size (N<4) or that the mean concentration is much greater than the cleanup level; Sample Size is the number of sampling locations used in the power analysis; Expected Sample Size is the number of concentration data needed to reach the Expected Power under current sample variability.

MAROS Zeroth Moment Analysis

Project: Tronox V Mo 13 wells Finch

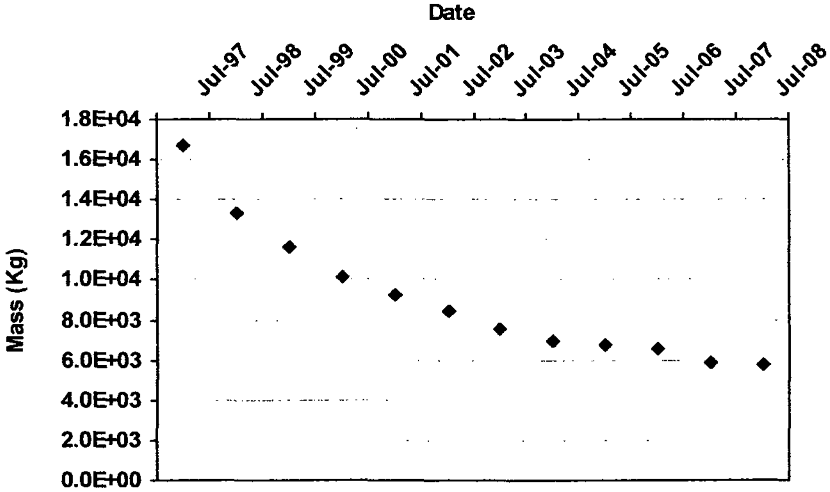
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Change in Dissolved Mass Over Time



Porosity: 0.20

Saturated Thickness:

Uniform: 200 ft

Mann Kendall S Statistic:

-66

Confidence in Trend:

100.0%

Coefficient of Variation:

0.37

Zeroth Moment Trend:

D

Data Table:

Effective Date	Constituent	Estimated Mass (Kg)	Number of Wells
7/1/1997	MOLYBDENUM	1.7E+04	12
7/1/1998	MOLYBDENUM	1.3E+04	12
7/1/1999	MOLYBDENUM	1.2E+04	12
7/1/2000	MOLYBDENUM	1.0E+04	13
7/1/2001	MOLYBDENUM	9.3E+03	13
7/1/2002	MOLYBDENUM	8.5E+03	13
7/1/2003	MOLYBDENUM	7.6E+03	13
7/1/2004	MOLYBDENUM	7.0E+03	13
7/1/2005	MOLYBDENUM	6.8E+03	13
7/1/2006	MOLYBDENUM	6.5E+03	13
7/1/2007	MOLYBDENUM	5.9E+03	13
7/1/2008	MOLYBDENUM	5.8E+03	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect. Moments are not calculated for sample events with less than 6 wells.

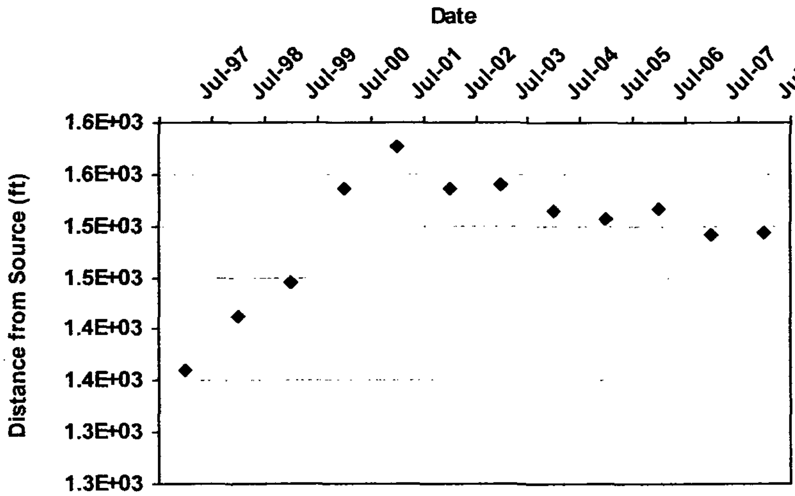
MAROS First Moment Analysis

Project: Tronox V Mo 13 wells Finch | **User Name:** Global Environmental

Location: Soda Springs | **State:** Idaho

COC: MOLYBDENUM

Distance from Source to Center of Mass



Mann Kendall S Statistic: 8

Confidence in Trend: 68.1%

Coefficient of Variation: 0.04

First Moment Trend: NT

Data Table:

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
7/1/1997	MOLYBDENUM	658,948	371,066	1,361	12
7/1/1998	MOLYBDENUM	658,845	371,077	1,412	12
7/1/1999	MOLYBDENUM	658,831	371,045	1,446	12
7/1/2000	MOLYBDENUM	658,812	370,947	1,536	13
7/1/2001	MOLYBDENUM	658,802	370,904	1,577	13
7/1/2002	MOLYBDENUM	658,828	370,936	1,536	13
7/1/2003	MOLYBDENUM	658,840	370,921	1,541	13
7/1/2004	MOLYBDENUM	658,839	370,954	1,514	13
7/1/2005	MOLYBDENUM	658,818	370,978	1,507	13
7/1/2006	MOLYBDENUM	658,789	370,987	1,517	13
7/1/2007	MOLYBDENUM	658,811	371,002	1,492	13
7/1/2008	MOLYBDENUM	658,795	371,013	1,493	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

MAROS First Moment Analysis

Project: Tronox V Mo 13 wells Finch

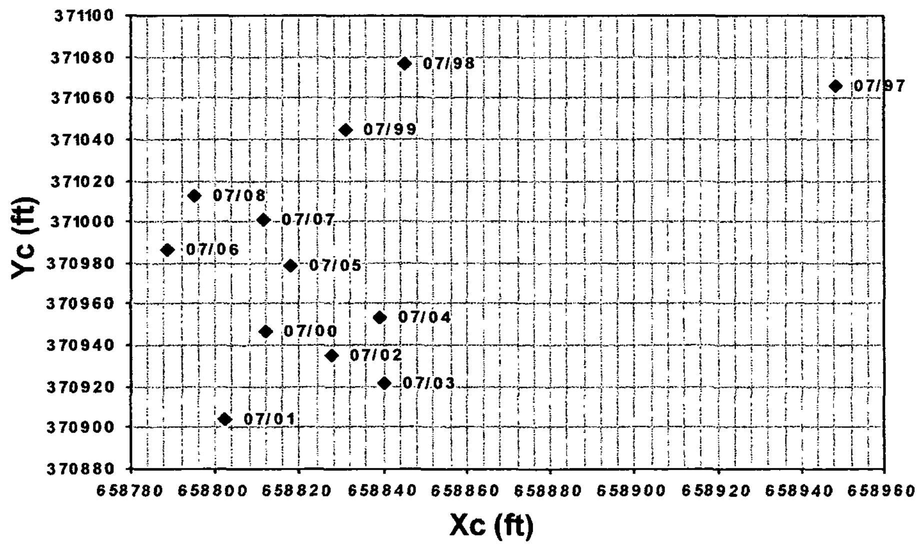
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Change in Location of Center of Mass Over Time



Groundwater Flow Direction:

Source Coordinate:

X: 659,700

Y: 372,200

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
7/1/1997	MOLYBDENUM	658,948	371,066	1,361	12
7/1/1998	MOLYBDENUM	658,845	371,077	1,412	12
7/1/1999	MOLYBDENUM	658,831	371,045	1,446	12
7/1/2000	MOLYBDENUM	658,812	370,947	1,536	13
7/1/2001	MOLYBDENUM	658,802	370,904	1,577	13
7/1/2002	MOLYBDENUM	658,828	370,936	1,536	13
7/1/2003	MOLYBDENUM	658,840	370,921	1,541	13
7/1/2004	MOLYBDENUM	658,839	370,954	1,514	13
7/1/2005	MOLYBDENUM	658,818	370,978	1,507	13
7/1/2006	MOLYBDENUM	658,789	370,987	1,517	13
7/1/2007	MOLYBDENUM	658,811	371,002	1,492	13
7/1/2008	MOLYBDENUM	658,795	371,013	1,493	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

MAROS Second Moment Analysis

Project: Tronox V Mo 13 wells Finch

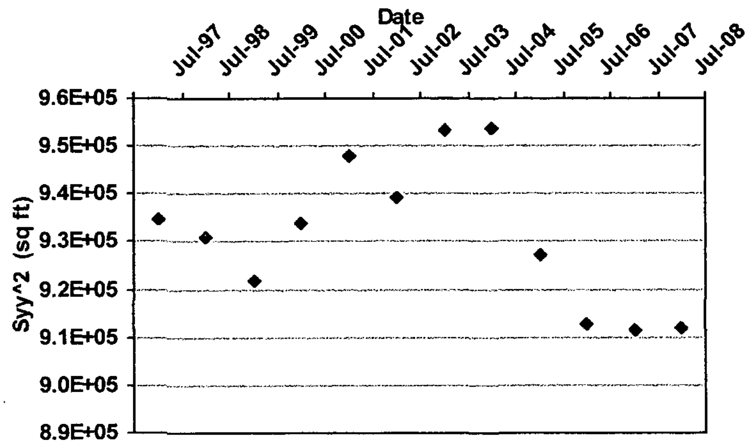
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Change in Plume Spread Over Time

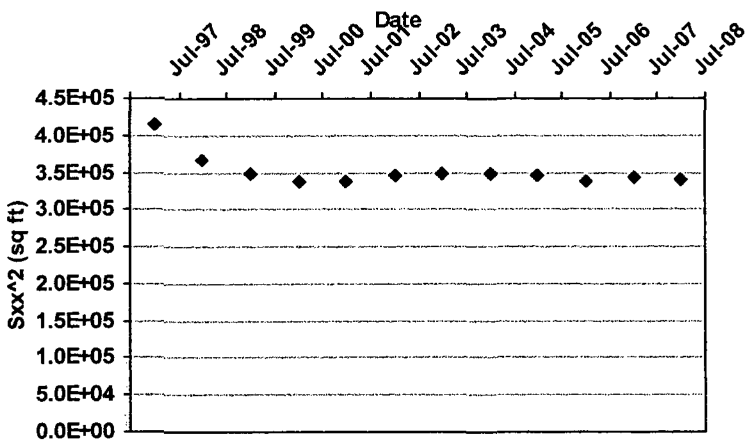


Mann Kendall S Statistic:
-16

Confidence in Trend:
84.5%

Coefficient of Variation:
0.02

Second Moment Trend:
S



Mann Kendall S Statistic:
-28

Confidence in Trend:
96.9%

Coefficient of Variation:
0.06

Second Moment Trend:
D

Data Table:

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
7/1/1997	MOLYBDENUM	416,438	934,664	12
7/1/1998	MOLYBDENUM	366,735	931,172	12
7/1/1999	MOLYBDENUM	348,266	921,983	12
7/1/2000	MOLYBDENUM	338,502	934,069	13
7/1/2001	MOLYBDENUM	337,814	948,110	13
7/1/2002	MOLYBDENUM	346,632	939,381	13
7/1/2003	MOLYBDENUM	348,701	953,440	13
7/1/2004	MOLYBDENUM	349,386	953,830	13
7/1/2005	MOLYBDENUM	345,268	927,098	13
7/1/2006	MOLYBDENUM	337,086	912,925	13
7/1/2007	MOLYBDENUM	344,802	911,562	13
7/1/2008	MOLYBDENUM	341,124	911,775	13

MAROS Second Moment Analysis

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events)

The Sigma XX and Sigma YY components are estimated using the given field coordinate system and then rotated to align with the estimated groundwater flow direction. Moments are not calculated for sample events with less than 6 wells.

MAROS Zeroth Moment Analysis

Project: Tronox V Mo 13 wells Finch

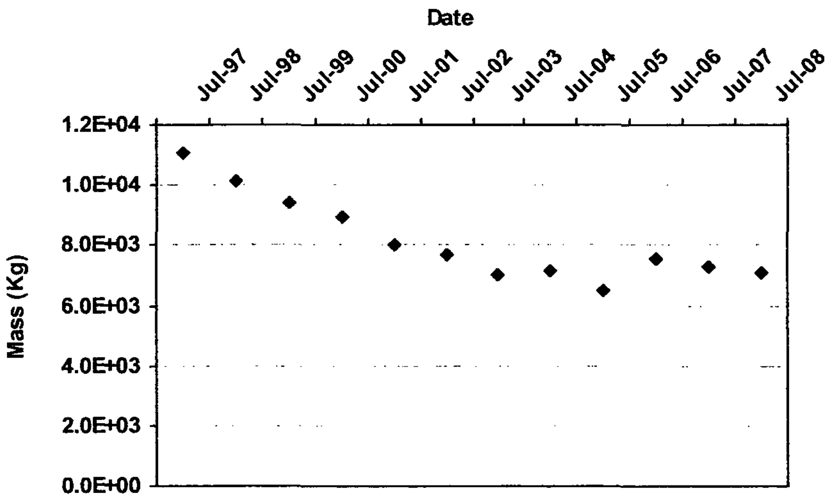
Location: Soda Springs

User Name: Global Environmental

State: Idaho

COC: VANADIUM

Change in Dissolved Mass Over Time



Porosity: 0.20

Saturated Thickness:

Uniform: 200 ft

Mann Kendall S Statistic:

-48

Confidence in Trend:

100.0%

Coefficient of Variation:

0.17

Zeroth Moment Trend:

D

Data Table:

Effective Date	Constituent	Estimated Mass (Kg)	Number of Wells
7/1/1997	VANADIUM	1.1E+04	12
7/1/1998	VANADIUM	1.0E+04	12
7/1/1999	VANADIUM	9.4E+03	12
7/1/2000	VANADIUM	8.9E+03	13
7/1/2001	VANADIUM	8.0E+03	13
7/1/2002	VANADIUM	7.7E+03	13
7/1/2003	VANADIUM	7.0E+03	13
7/1/2004	VANADIUM	7.2E+03	13
7/1/2005	VANADIUM	6.5E+03	13
7/1/2006	VANADIUM	7.5E+03	13
7/1/2007	VANADIUM	7.3E+03	13
7/1/2008	VANADIUM	7.1E+03	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect. Moments are not calculated for sample events with less than 6 wells.

MAROS First Moment Analysis

Project: Tronox V Mo 13 wells Finch

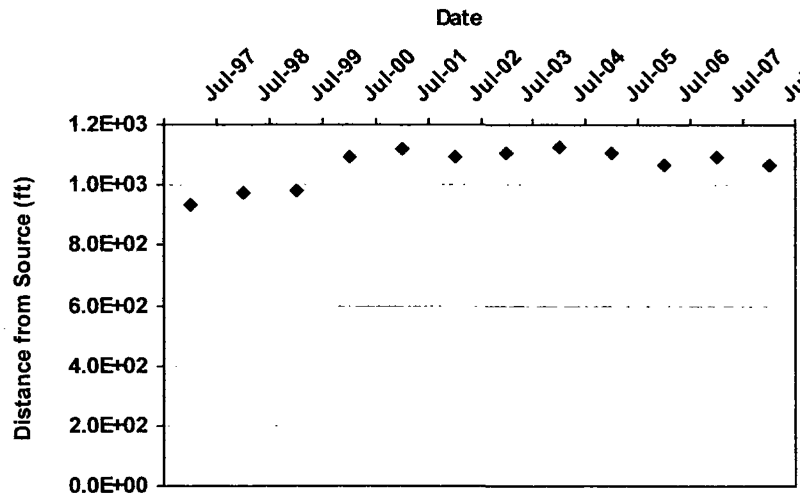
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: VANADIUM

Distance from Source to Center of Mass



Mann Kendall S Statistic:

18

Confidence in Trend:

87.5%

Coefficient of Variation:

0.06

First Moment Trend:

NT

Data Table:

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
7/1/1997	VANADIUM	658,898	371,723	933	12
7/1/1998	VANADIUM	658,859	371,708	974	12
7/1/1999	VANADIUM	658,859	371,691	983	12
7/1/2000	VANADIUM	658,762	371,636	1,095	13
7/1/2001	VANADIUM	658,730	371,638	1,121	13
7/1/2002	VANADIUM	658,732	371,685	1,096	13
7/1/2003	VANADIUM	658,723	371,677	1,108	13
7/1/2004	VANADIUM	658,726	371,629	1,129	13
7/1/2005	VANADIUM	658,735	371,663	1,104	13
7/1/2006	VANADIUM	658,763	371,691	1,066	13
7/1/2007	VANADIUM	658,766	371,629	1,095	13
7/1/2008	VANADIUM	658,802	371,621	1,068	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

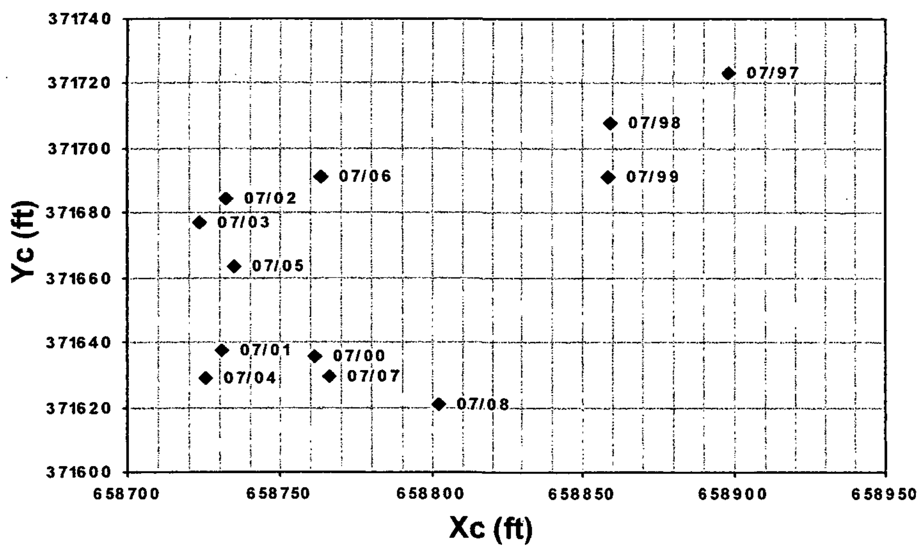
MAROS First Moment Analysis

Project: Tronox V Mo 13 wells Finch | **User Name:** Global Environmental

Location: Soda Springs | **State:** Idaho

COC: VANADIUM

Change in Location of Center of Mass Over Time



Groundwater Flow Direction:

Source Coordinate:

X: 659,700

Y: 372,200

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
7/1/1997	VANADIUM	658,898	371,723	933	12
7/1/1998	VANADIUM	658,859	371,708	974	12
7/1/1999	VANADIUM	658,859	371,691	983	12
7/1/2000	VANADIUM	658,762	371,636	1,095	13
7/1/2001	VANADIUM	658,730	371,638	1,121	13
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7/1/2003	VANADIUM	658,723	371,677	1,108	13
7/1/2004	VANADIUM	658,726	371,629	1,129	13
7/1/2005	VANADIUM	658,735	371,663	1,104	13
7/1/2006	VANADIUM	658,763	371,691	1,066	13
7/1/2007	VANADIUM	658,766	371,629	1,095	13
7/1/2008	VANADIUM	658,802	371,621	1,068	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

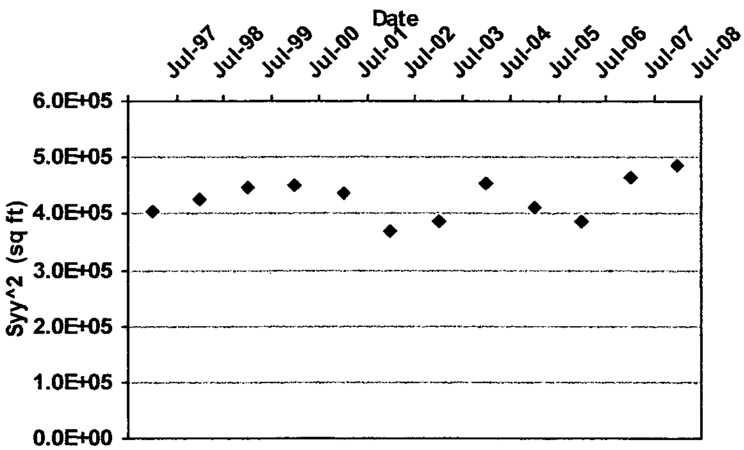
MAROS Second Moment Analysis

Project: Tronox V Mo 13 wells Finch | **User Name:** Global Environmental

Location: Soda Springs | **State:** Idaho

COC: VANADIUM

Change in Plume Spread Over Time

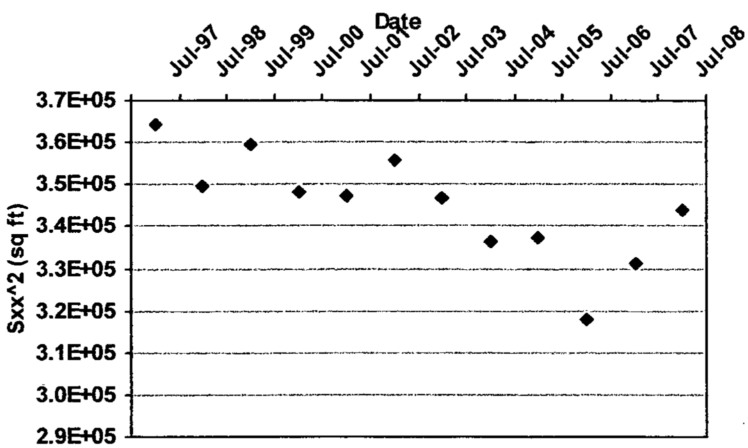


Mann Kendall S Statistic: 18

Confidence in Trend: 87.5%

Coefficient of Variation: 0.08

Second Moment Trend: NT



Mann Kendall S Statistic: -46

Confidence in Trend: 100.0%

Coefficient of Variation: 0.04

Second Moment Trend: D

Data Table:

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
7/1/1997	VANADIUM	364,272	404,774	12
7/1/1998	VANADIUM	349,730	427,430	12
7/1/1999	VANADIUM	359,394	447,267	12
7/1/2000	VANADIUM	348,452	452,621	13
7/1/2001	VANADIUM	347,063	436,829	13
7/1/2002	VANADIUM	355,676	370,077	13
7/1/2003	VANADIUM	346,758	387,384	13
7/1/2004	VANADIUM	336,229	453,869	13
7/1/2005	VANADIUM	337,312	410,527	13
/1/2006	VANADIUM	317,813	388,207	13
7/1/2007	VANADIUM	331,031	464,006	13
7/1/2008	VANADIUM	343,745	486,609	13

MAROS Second Moment Analysis

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells

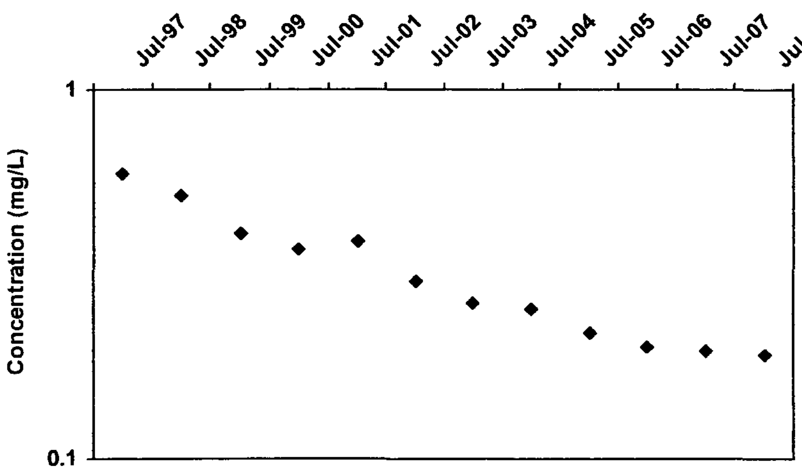
Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events)

The Sigma XX and Sigma YY components are estimated using the given field coordinate system and then rotated to align with the estimated groundwater flow direction. Moments are not calculated for sample events with less than 6 wells.

MAROS Mann-Kendall Statistics Summary

Well: Finch Spring
Well Type: T
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-64

Confidence in Trend:
100.0%

Coefficient of Variation:
0.41

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

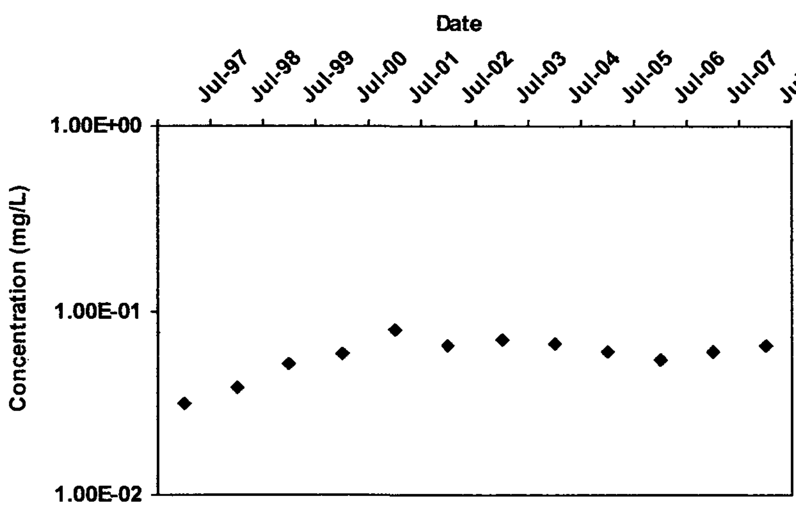
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
Finch Spring	T	7/1/1997	MOLYBDENUM	5.9E-01		1	1
Finch Spring	T	7/1/1998	MOLYBDENUM	5.2E-01		2	2
Finch Spring	T	7/1/1999	MOLYBDENUM	4.1E-01		2	2
Finch Spring	T	7/1/2000	MOLYBDENUM	3.7E-01		2	2
Finch Spring	T	7/1/2001	MOLYBDENUM	3.9E-01		2	2
Finch Spring	T	7/1/2002	MOLYBDENUM	3.0E-01		2	2
Finch Spring	T	7/1/2003	MOLYBDENUM	2.6E-01		2	2
Finch Spring	T	7/1/2004	MOLYBDENUM	2.5E-01		2	2
Finch Spring	T	7/1/2005	MOLYBDENUM	2.2E-01		2	2
Finch Spring	T	7/1/2006	MOLYBDENUM	2.0E-01		2	2
Finch Spring	T	7/1/2007	MOLYBDENUM	1.9E-01		2	2
Finch Spring	T	7/1/2008	MOLYBDENUM	1.9E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: Finch Spring
Well Type: T
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: 20

Confidence in Trend: 90.2%

Coefficient of Variation: 0.22

Mann Kendall Concentration Trend: (See Note) PI

Data Table:

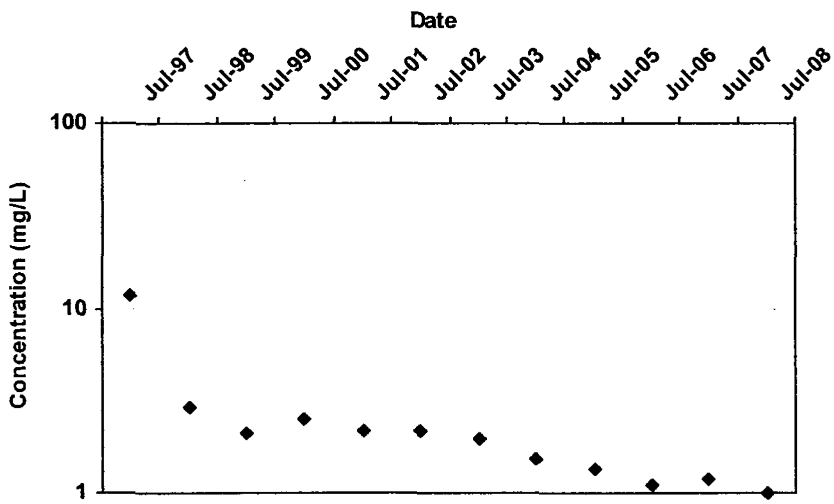
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
Finch Spring	T	7/1/1997	VANADIUM	3.2E-02		1	1
Finch Spring	T	7/1/1998	VANADIUM	3.9E-02		2	2
Finch Spring	T	7/1/1999	VANADIUM	5.2E-02		2	2
Finch Spring	T	7/1/2000	VANADIUM	5.9E-02		2	2
Finch Spring	T	7/1/2001	VANADIUM	7.8E-02		2	2
Finch Spring	T	7/1/2002	VANADIUM	6.5E-02		2	2
Finch Spring	T	7/1/2003	VANADIUM	6.9E-02		2	2
Finch Spring	T	7/1/2004	VANADIUM	6.5E-02		2	2
Finch Spring	T	7/1/2005	VANADIUM	6.0E-02		2	2
Finch Spring	T	7/1/2006	VANADIUM	5.4E-02		2	2
Finch Spring	T	7/1/2007	VANADIUM	5.9E-02		2	2
Finch Spring	T	7/1/2008	VANADIUM	6.4E-02		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-2
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -56

Confidence in Trend: 100.0%

Coefficient of Variation: 1.11

Mann Kendall Concentration Trend: (See Note) D

Data Table:

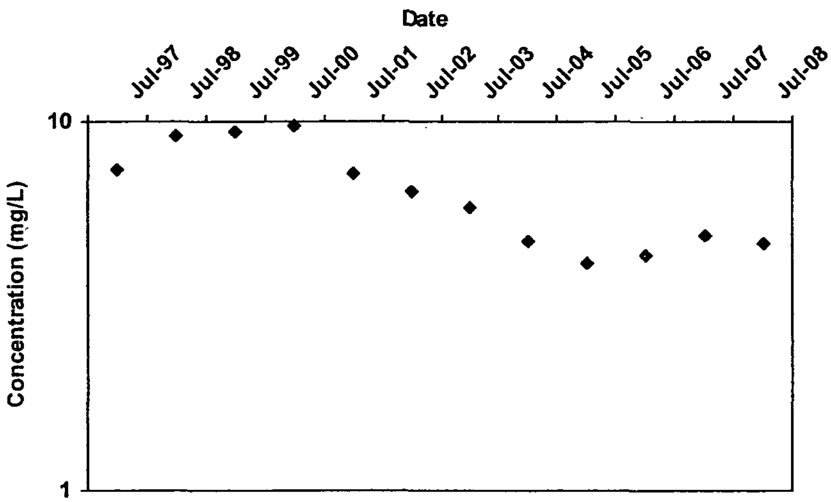
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-2	S	7/1/1997	MOLYBDENUM	1.2E+01		1	1
KM-2	S	7/1/1998	MOLYBDENUM	2.9E+00		2	2
KM-2	S	7/1/1999	MOLYBDENUM	2.1E+00		2	2
KM-2	S	7/1/2000	MOLYBDENUM	2.5E+00		2	2
KM-2	S	7/1/2001	MOLYBDENUM	2.1E+00		2	2
KM-2	S	7/1/2002	MOLYBDENUM	2.2E+00		2	2
KM-2	S	7/1/2003	MOLYBDENUM	1.9E+00		2	2
KM-2	S	7/1/2004	MOLYBDENUM	1.5E+00		2	2
KM-2	S	7/1/2005	MOLYBDENUM	1.3E+00		2	2
KM-2	S	7/1/2006	MOLYBDENUM	1.1E+00		2	2
KM-2	S	7/1/2007	MOLYBDENUM	1.2E+00		2	2
KM-2	S	7/1/2008	MOLYBDENUM	1.0E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-2
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -42

Confidence in Trend: 99.8%

Coefficient of Variation: 0.32

Mann Kendall Concentration Trend: (See Note) D

Data Table:

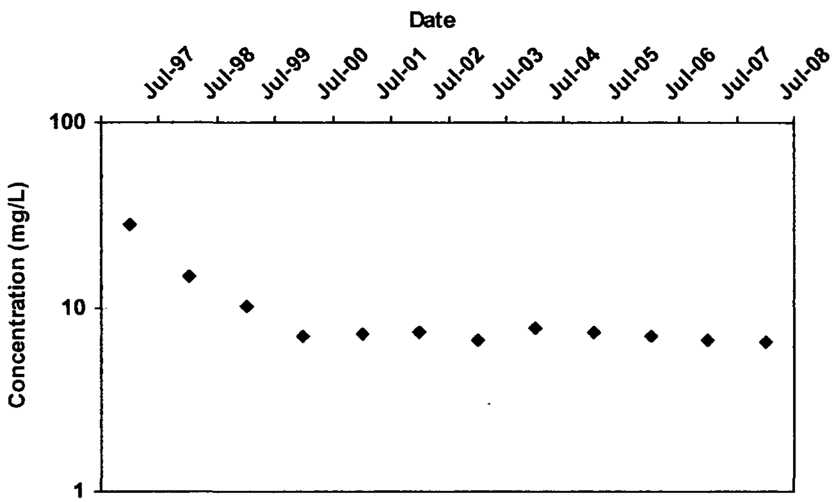
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-2	S	7/1/1997	VANADIUM	7.5E+00		1	1
KM-2	S	7/1/1998	VANADIUM	9.2E+00		2	2
KM-2	S	7/1/1999	VANADIUM	9.4E+00		2	2
KM-2	S	7/1/2000	VANADIUM	9.8E+00		2	2
KM-2	S	7/1/2001	VANADIUM	7.2E+00		2	2
KM-2	S	7/1/2002	VANADIUM	6.4E+00		2	2
KM-2	S	7/1/2003	VANADIUM	5.9E+00		2	2
KM-2	S	7/1/2004	VANADIUM	4.8E+00		2	2
KM-2	S	7/1/2005	VANADIUM	4.1E+00		2	2
KM-2	S	7/1/2006	VANADIUM	4.3E+00		2	2
KM-2	S	7/1/2007	VANADIUM	4.9E+00		2	2
KM-2	S	7/1/2008	VANADIUM	4.7E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-3
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -42

Confidence in Trend: 99.8%

Coefficient of Variation: 0.64

Mann Kendall Concentration Trend: (See Note) D

Data Table:

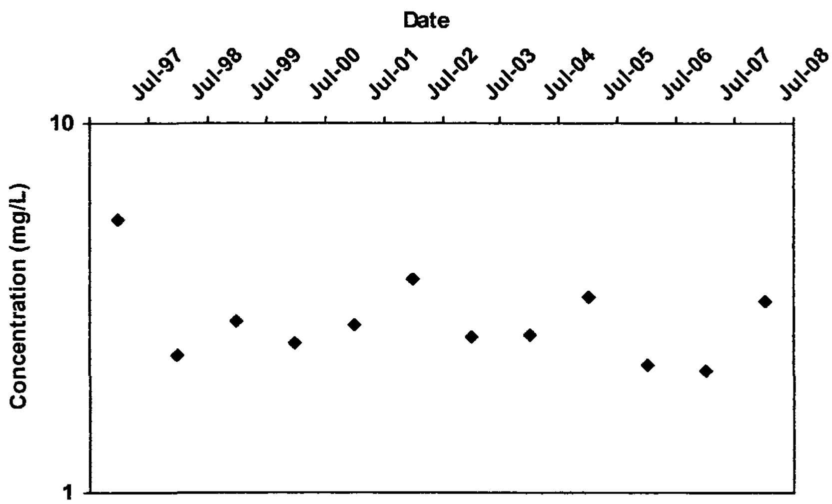
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-3	S	7/1/1997	MOLYBDENUM	2.8E+01		1	1
KM-3	S	7/1/1998	MOLYBDENUM	1.5E+01		2	2
KM-3	S	7/1/1999	MOLYBDENUM	1.0E+01		2	2
KM-3	S	7/1/2000	MOLYBDENUM	7.0E+00		2	2
KM-3	S	7/1/2001	MOLYBDENUM	7.1E+00		2	2
KM-3	S	7/1/2002	MOLYBDENUM	7.3E+00		2	2
KM-3	S	7/1/2003	MOLYBDENUM	6.7E+00		2	2
KM-3	S	7/1/2004	MOLYBDENUM	7.7E+00		2	2
KM-3	S	7/1/2005	MOLYBDENUM	7.3E+00		2	2
KM-3	S	7/1/2006	MOLYBDENUM	7.0E+00		2	2
KM-3	S	7/1/2007	MOLYBDENUM	6.6E+00		2	2
KM-3	S	7/1/2008	MOLYBDENUM	6.5E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-3
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 to 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-12

Confidence in Trend:
77.0%

Coefficient of Variation:
0.30

Mann Kendall Concentration Trend: (See Note)
S

Data Table:

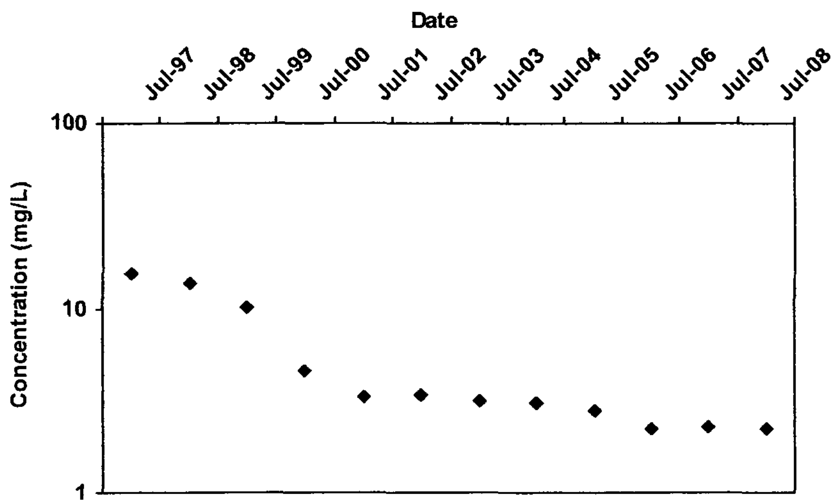
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-3	S	7/1/1997	VANADIUM	5.5E+00		1	1
KM-3	S	7/1/1998	VANADIUM	2.3E+00		2	2
KM-3	S	7/1/1999	VANADIUM	2.9E+00		2	2
KM-3	S	7/1/2000	VANADIUM	2.6E+00		2	2
KM-3	S	7/1/2001	VANADIUM	2.8E+00		2	2
KM-3	S	7/1/2002	VANADIUM	3.8E+00		2	2
KM-3	S	7/1/2003	VANADIUM	2.6E+00		2	2
KM-3	S	7/1/2004	VANADIUM	2.7E+00		2	2
KM-3	S	7/1/2005	VANADIUM	3.4E+00		2	2
KM-3	S	7/1/2006	VANADIUM	2.2E+00		2	2
KM-3	S	7/1/2007	VANADIUM	2.1E+00		2	2
KM-3	S	7/1/2008	VANADIUM	3.3E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-4
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -62

Confidence in Trend: 100.0%

Coefficient of Variation: 0.86

Mann Kendall Concentration Trend: (See Note) D

Data Table:

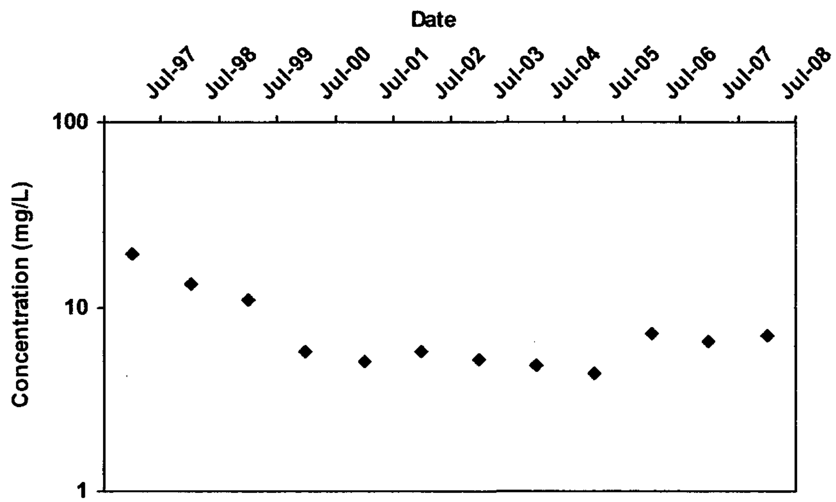
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-4	S	7/1/1997	MOLYBDENUM	1.5E+01		1	1
KM-4	S	7/1/1998	MOLYBDENUM	1.4E+01		2	2
KM-4	S	7/1/1999	MOLYBDENUM	1.0E+01		2	2
KM-4	S	7/1/2000	MOLYBDENUM	4.6E+00		2	2
KM-4	S	7/1/2001	MOLYBDENUM	3.3E+00		2	2
KM-4	S	7/1/2002	MOLYBDENUM	3.4E+00		2	2
KM-4	S	7/1/2003	MOLYBDENUM	3.1E+00		2	2
KM-4	S	7/1/2004	MOLYBDENUM	3.1E+00		2	2
KM-4	S	7/1/2005	MOLYBDENUM	2.7E+00		2	2
KM-4	S	7/1/2006	MOLYBDENUM	2.2E+00		2	2
KM-4	S	7/1/2007	MOLYBDENUM	2.3E+00		2	2
KM-4	S	7/1/2008	MOLYBDENUM	2.2E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-4
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -22

Confidence in Trend: 92.4%

Coefficient of Variation: 0.56

Mann Kendall Concentration Trend: (See Note) PD

Data Table:

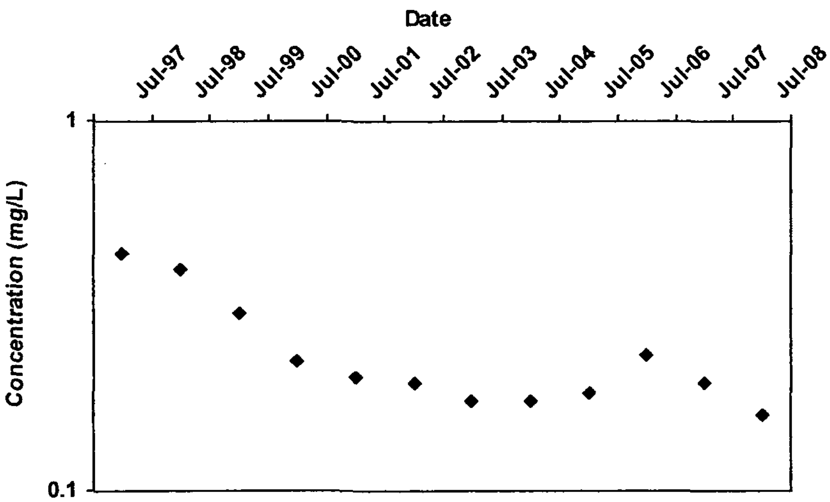
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-4	S	7/1/1997	VANADIUM	1.9E+01		1	1
KM-4	S	7/1/1998	VANADIUM	1.3E+01		2	2
KM-4	S	7/1/1999	VANADIUM	1.1E+01		2	2
KM-4	S	7/1/2000	VANADIUM	5.7E+00		2	2
KM-4	S	7/1/2001	VANADIUM	5.0E+00		2	2
KM-4	S	7/1/2002	VANADIUM	5.7E+00		2	2
KM-4	S	7/1/2003	VANADIUM	5.2E+00		2	2
KM-4	S	7/1/2004	VANADIUM	4.8E+00		2	2
KM-4	S	7/1/2005	VANADIUM	4.3E+00		2	2
KM-4	S	7/1/2006	VANADIUM	7.1E+00		2	2
KM-4	S	7/1/2007	VANADIUM	6.4E+00		2	2
KM-4	S	7/1/2008	VANADIUM	6.9E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-5
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-43

Confidence in Trend:
99.9%

Coefficient of Variation:
0.38

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

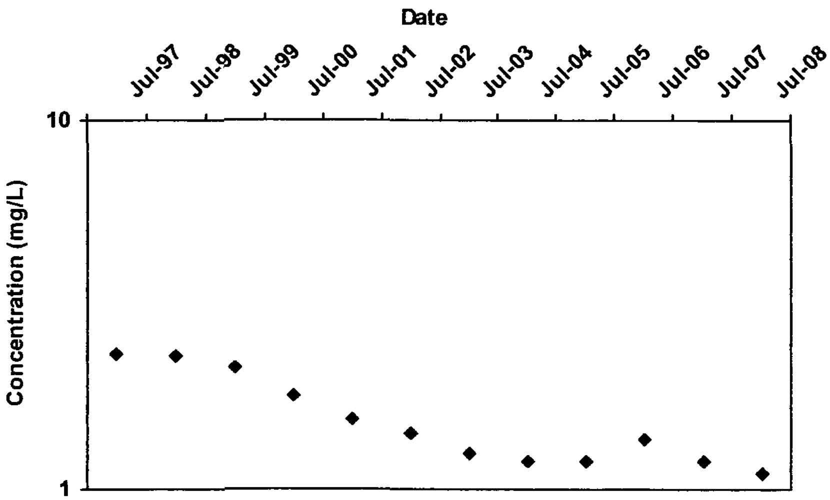
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-5	S	7/1/1997	MOLYBDENUM	4.4E-01		1	1
KM-5	S	7/1/1998	MOLYBDENUM	4.0E-01		2	2
KM-5	S	7/1/1999	MOLYBDENUM	3.0E-01		2	2
KM-5	S	7/1/2000	MOLYBDENUM	2.3E-01		2	2
KM-5	S	7/1/2001	MOLYBDENUM	2.0E-01		2	2
KM-5	S	7/1/2002	MOLYBDENUM	1.9E-01		2	2
KM-5	S	7/1/2003	MOLYBDENUM	1.7E-01		2	2
KM-5	S	7/1/2004	MOLYBDENUM	1.7E-01		2	2
KM-5	S	7/1/2005	MOLYBDENUM	1.8E-01		2	2
KM-5	S	7/1/2006	MOLYBDENUM	2.3E-01		2	2
KM-5	S	7/1/2007	MOLYBDENUM	1.9E-01		2	2
KM-5	S	7/1/2008	MOLYBDENUM	1.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-5
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-57

Confidence in Trend:
100.0%

Coefficient of Variation:
0.29

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

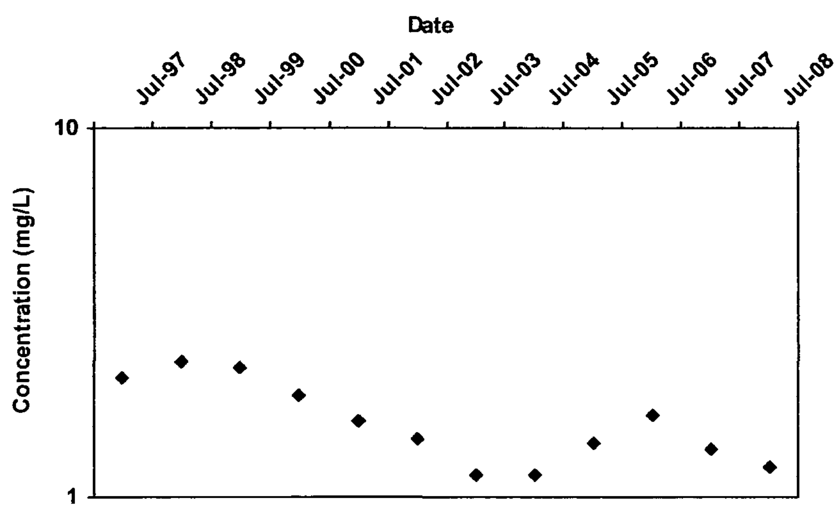
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-5	S	7/1/1997	VANADIUM	2.3E+00		1	1
KM-5	S	7/1/1998	VANADIUM	2.3E+00		2	2
KM-5	S	7/1/1999	VANADIUM	2.1E+00		2	2
KM-5	S	7/1/2000	VANADIUM	1.8E+00		2	2
KM-5	S	7/1/2001	VANADIUM	1.5E+00		2	2
KM-5	S	7/1/2002	VANADIUM	1.4E+00		2	2
KM-5	S	7/1/2003	VANADIUM	1.2E+00		2	2
KM-5	S	7/1/2004	VANADIUM	1.2E+00		2	2
KM-5	S	7/1/2005	VANADIUM	1.2E+00		2	2
KM-5	S	7/1/2006	VANADIUM	1.4E+00		2	2
KM-5	S	7/1/2007	VANADIUM	1.2E+00		2	2
KM-5	S	7/1/2008	VANADIUM	1.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-6
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-39

Confidence in Trend:
99.7%

Coefficient of Variation:
0.26

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

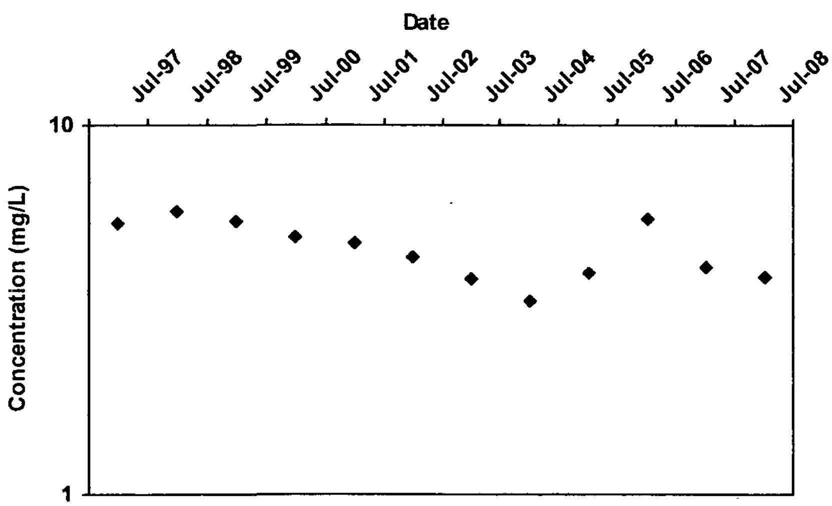
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-6	S	7/1/1997	MOLYBDENUM	2.1E+00		1	1
KM-6	S	7/1/1998	MOLYBDENUM	2.3E+00		2	2
KM-6	S	7/1/1999	MOLYBDENUM	2.3E+00		2	2
KM-6	S	7/1/2000	MOLYBDENUM	1.9E+00		2	2
KM-6	S	7/1/2001	MOLYBDENUM	1.6E+00		2	2
KM-6	S	7/1/2002	MOLYBDENUM	1.4E+00		2	2
KM-6	S	7/1/2003	MOLYBDENUM	1.1E+00		2	2
KM-6	S	7/1/2004	MOLYBDENUM	1.1E+00		2	2
KM-6	S	7/1/2005	MOLYBDENUM	1.4E+00		2	2
KM-6	S	7/1/2006	MOLYBDENUM	1.7E+00		2	2
KM-6	S	7/1/2007	MOLYBDENUM	1.3E+00		2	2
KM-6	S	7/1/2008	MOLYBDENUM	1.2E+00		1	1

Note: *Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect*

MAROS Mann-Kendall Statistics Summary

Well: KM-6
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-32

Confidence in Trend:
98.4%

Coefficient of Variation:
0.18

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

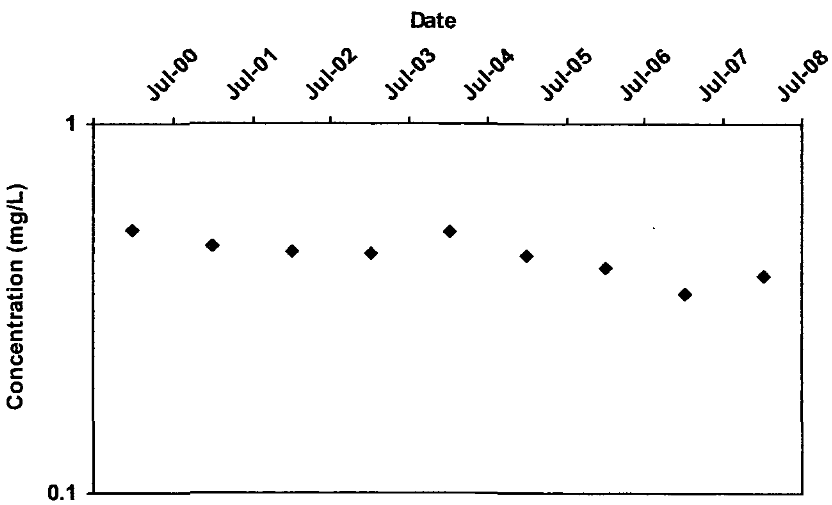
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-6	S	7/1/1997	VANADIUM	5.4E+00		1	1
KM-6	S	7/1/1998	VANADIUM	5.9E+00		2	2
KM-6	S	7/1/1999	VANADIUM	5.5E+00		2	2
KM-6	S	7/1/2000	VANADIUM	5.0E+00		2	2
KM-6	S	7/1/2001	VANADIUM	4.8E+00		2	2
KM-6	S	7/1/2002	VANADIUM	4.4E+00		2	2
KM-6	S	7/1/2003	VANADIUM	3.8E+00		2	2
KM-6	S	7/1/2004	VANADIUM	3.3E+00		2	2
KM-6	S	7/1/2005	VANADIUM	4.0E+00		2	2
KM-6	S	7/1/2006	VANADIUM	5.6E+00		2	2
KM-6	S	7/1/2007	VANADIUM	4.1E+00		2	2
KM-6	S	7/1/2008	VANADIUM	3.9E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-7
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -28

Confidence in Trend: 99.9%

Coefficient of Variation: 0.12

Mann Kendall Concentration Trend: (See Note) D

Data Table:

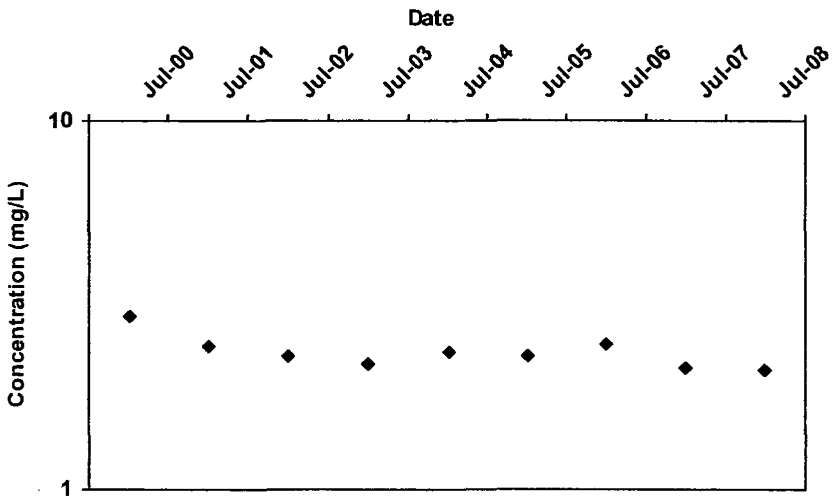
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-7	S	7/1/2000	MOLYBDENUM	5.2E-01		2	2
KM-7	S	7/1/2001	MOLYBDENUM	4.7E-01		2	2
KM-7	S	7/1/2002	MOLYBDENUM	4.5E-01		2	2
KM-7	S	7/1/2003	MOLYBDENUM	4.4E-01		2	2
KM-7	S	7/1/2004	MOLYBDENUM	5.1E-01		2	2
KM-7	S	7/1/2005	MOLYBDENUM	4.4E-01		2	2
KM-7	S	7/1/2006	MOLYBDENUM	4.1E-01		2	2
KM-7	S	7/1/2007	MOLYBDENUM	3.5E-01		2	2
KM-7	S	7/1/2008	MOLYBDENUM	3.9E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-7
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-20

Confidence in Trend:
97.8%

Coefficient of Variation:
0.11

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

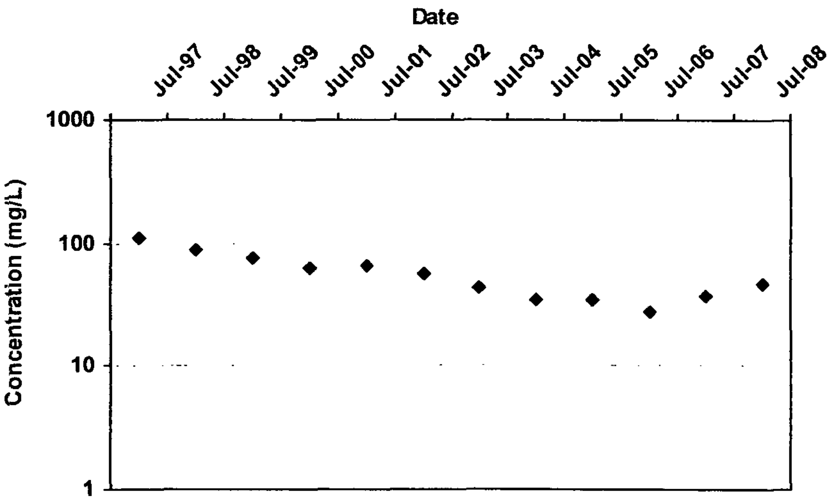
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-7	S	7/1/2000	VANADIUM	2.9E+00		2	2
KM-7	S	7/1/2001	VANADIUM	2.5E+00		2	2
KM-7	S	7/1/2002	VANADIUM	2.3E+00		2	2
KM-7	S	7/1/2003	VANADIUM	2.2E+00		2	2
KM-7	S	7/1/2004	VANADIUM	2.3E+00		2	2
KM-7	S	7/1/2005	VANADIUM	2.3E+00		2	2
KM-7	S	7/1/2006	VANADIUM	2.5E+00		2	2
KM-7	S	7/1/2007	VANADIUM	2.1E+00		2	2
KM-7	S	7/1/2008	VANADIUM	2.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-8
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:

-48

Confidence in Trend:

100.0%

Coefficient of Variation:

0.43

Mann Kendall Concentration Trend: (See Note)

D

Data Table:

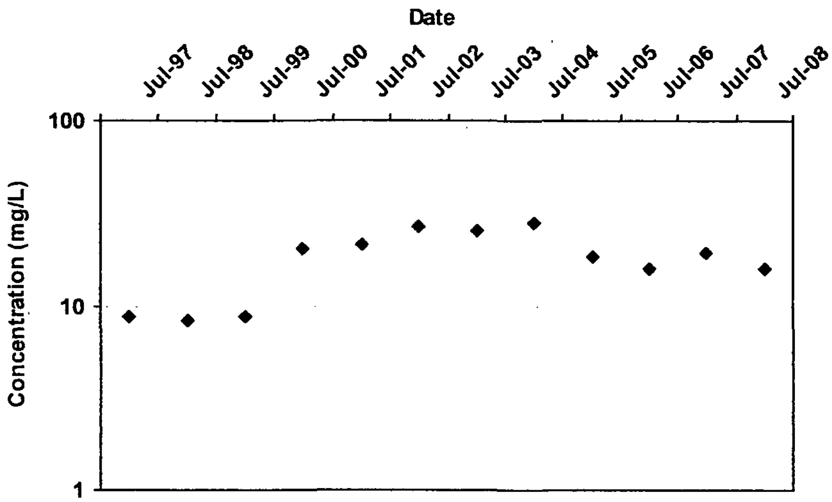
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-8	S	7/1/1997	MOLYBDENUM	1.1E+02		1	1
KM-8	S	7/1/1998	MOLYBDENUM	8.8E+01		2	2
KM-8	S	7/1/1999	MOLYBDENUM	7.7E+01		2	2
KM-8	S	7/1/2000	MOLYBDENUM	6.4E+01		2	2
KM-8	S	7/1/2001	MOLYBDENUM	6.6E+01		2	2
KM-8	S	7/1/2002	MOLYBDENUM	5.7E+01		2	2
KM-8	S	7/1/2003	MOLYBDENUM	4.3E+01		2	2
KM-8	S	7/1/2004	MOLYBDENUM	3.5E+01		2	2
KM-8	S	7/1/2005	MOLYBDENUM	3.5E+01		2	2
KM-8	S	7/1/2006	MOLYBDENUM	2.8E+01		2	2
KM-8	S	7/1/2007	MOLYBDENUM	3.8E+01		2	2
KM-8	S	7/1/2008	MOLYBDENUM	4.7E+01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-8
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
14

Confidence in Trend:
81.0%

Coefficient of Variation:
0.38

Mann Kendall Concentration Trend: (See Note)
NT

Data Table:

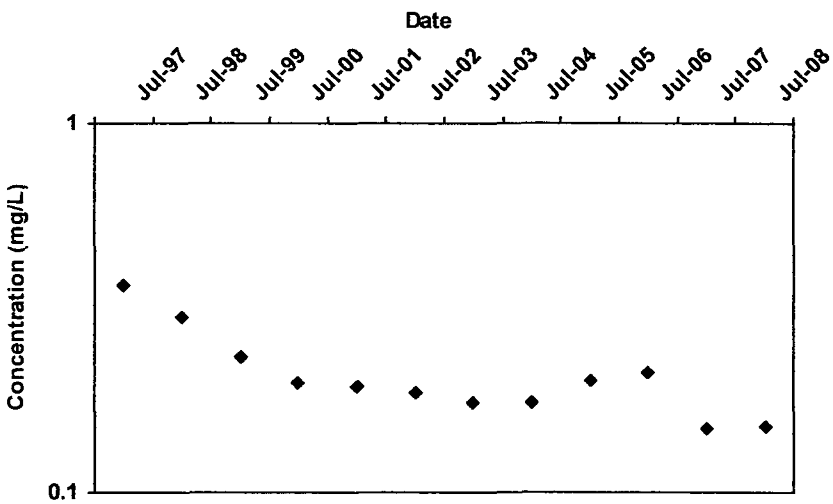
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-8	S	7/1/1997	VANADIUM	8.8E+00		1	1
KM-8	S	7/1/1998	VANADIUM	8.3E+00		2	2
KM-8	S	7/1/1999	VANADIUM	8.6E+00		2	2
KM-8	S	7/1/2000	VANADIUM	2.0E+01		2	2
KM-8	S	7/1/2001	VANADIUM	2.1E+01		2	2
KM-8	S	7/1/2002	VANADIUM	2.7E+01		2	2
KM-8	S	7/1/2003	VANADIUM	2.5E+01		2	2
KM-8	S	7/1/2004	VANADIUM	2.8E+01		2	2
KM-8	S	7/1/2005	VANADIUM	1.8E+01		2	2
KM-8	S	7/1/2006	VANADIUM	1.6E+01		2	2
KM-8	S	7/1/2007	VANADIUM	1.9E+01		2	2
KM-8	S	7/1/2008	VANADIUM	1.6E+01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-9
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-41

Confidence in Trend:
99.8%

Coefficient of Variation:
0.30

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

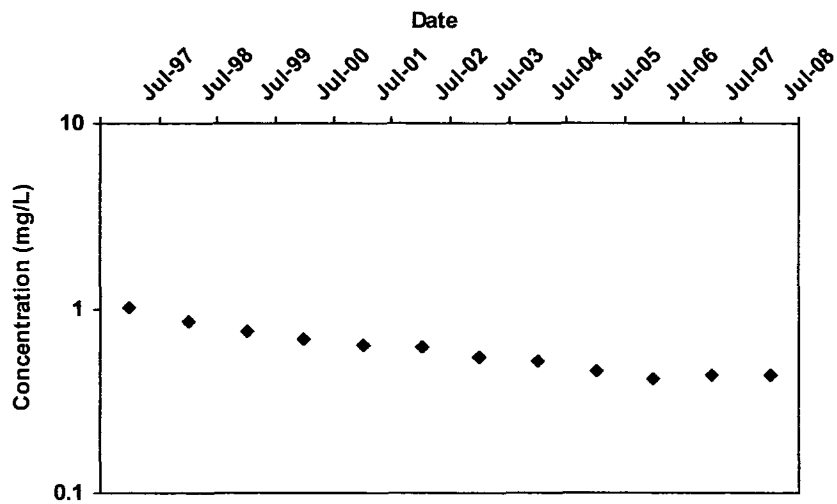
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-9	S	7/1/1997	MOLYBDENUM	3.6E-01		1	1
KM-9	S	7/1/1998	MOLYBDENUM	3.0E-01		2	2
KM-9	S	7/1/1999	MOLYBDENUM	2.3E-01		2	2
KM-9	S	7/1/2000	MOLYBDENUM	2.0E-01		2	2
KM-9	S	7/1/2001	MOLYBDENUM	1.9E-01		2	2
KM-9	S	7/1/2002	MOLYBDENUM	1.9E-01		2	2
KM-9	S	7/1/2003	MOLYBDENUM	1.7E-01		2	2
KM-9	S	7/1/2004	MOLYBDENUM	1.7E-01		2	2
KM-9	S	7/1/2005	MOLYBDENUM	2.0E-01		2	2
KM-9	S	7/1/2006	MOLYBDENUM	2.1E-01		2	2
KM-9	S	7/1/2007	MOLYBDENUM	1.5E-01		2	2
KM-9	S	7/1/2008	MOLYBDENUM	1.5E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-9
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-60

Confidence in Trend:
100.0%

Coefficient of Variation:
0.31

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

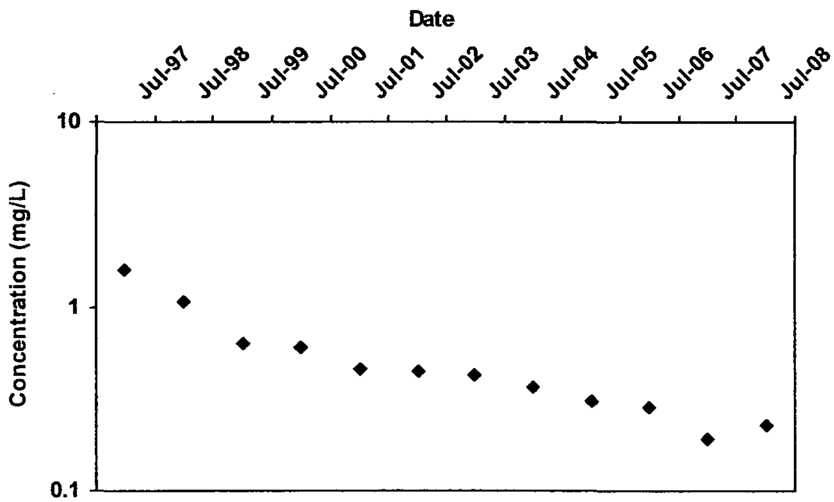
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-9	S	7/1/1997	VANADIUM	1.0E+00		1	1
KM-9	S	7/1/1998	VANADIUM	8.6E-01		2	2
KM-9	S	7/1/1999	VANADIUM	7.6E-01		2	2
KM-9	S	7/1/2000	VANADIUM	6.8E-01		2	2
KM-9	S	7/1/2001	VANADIUM	6.3E-01		2	2
KM-9	S	7/1/2002	VANADIUM	6.2E-01		2	2
KM-9	S	7/1/2003	VANADIUM	5.4E-01		2	2
KM-9	S	7/1/2004	VANADIUM	5.2E-01		2	2
KM-9	S	7/1/2005	VANADIUM	4.5E-01		2	2
KM-9	S	7/1/2006	VANADIUM	4.1E-01		2	2
KM-9	S	7/1/2007	VANADIUM	4.3E-01		2	2
KM-9	S	7/1/2008	VANADIUM	4.3E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-13
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-64

Confidence in Trend:
100.0%

Coefficient of Variation:
0.73

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

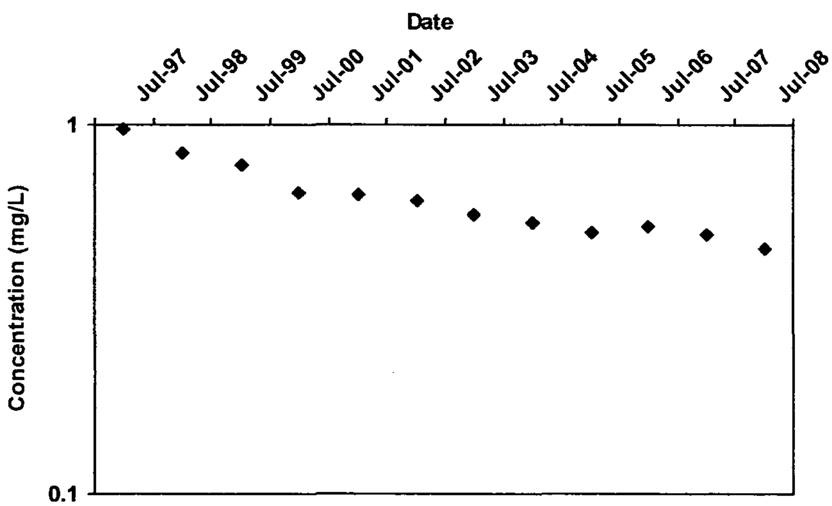
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-13	S	7/1/1997	MOLYBDENUM	1.6E+00		1	1
KM-13	S	7/1/1998	MOLYBDENUM	1.1E+00		2	2
KM-13	S	7/1/1999	MOLYBDENUM	6.3E-01		2	2
KM-13	S	7/1/2000	MOLYBDENUM	6.0E-01		2	2
KM-13	S	7/1/2001	MOLYBDENUM	4.6E-01		2	2
KM-13	S	7/1/2002	MOLYBDENUM	4.4E-01		2	2
KM-13	S	7/1/2003	MOLYBDENUM	4.2E-01		2	2
KM-13	S	7/1/2004	MOLYBDENUM	3.6E-01		2	2
KM-13	S	7/1/2005	MOLYBDENUM	3.1E-01		2	2
KM-13	S	7/1/2006	MOLYBDENUM	2.8E-01		2	2
KM-13	S	7/1/2007	MOLYBDENUM	1.9E-01		2	2
KM-13	S	7/1/2008	MOLYBDENUM	2.3E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-13
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-64

Confidence in Trend:
100.0%

Coefficient of Variation:
0.24

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

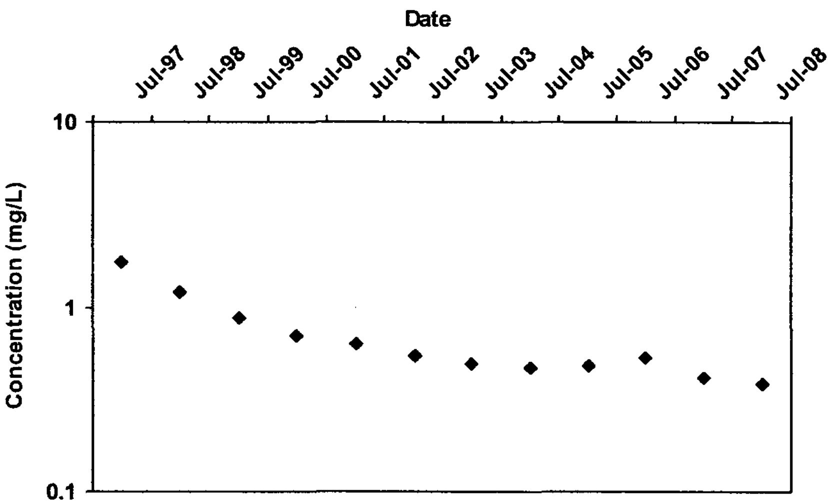
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-13	S	7/1/1997	VANADIUM	9.7E-01		1	1
KM-13	S	7/1/1998	VANADIUM	8.3E-01		2	2
KM-13	S	7/1/1999	VANADIUM	7.8E-01		2	2
KM-13	S	7/1/2000	VANADIUM	6.5E-01		2	2
KM-13	S	7/1/2001	VANADIUM	6.5E-01		2	2
KM-13	S	7/1/2002	VANADIUM	6.2E-01		2	2
KM-13	S	7/1/2003	VANADIUM	5.7E-01		2	2
KM-13	S	7/1/2004	VANADIUM	5.4E-01		2	2
KM-13	S	7/1/2005	VANADIUM	5.1E-01		2	2
KM-13	S	7/1/2006	VANADIUM	5.3E-01		2	2
KM-13	S	7/1/2007	VANADIUM	5.0E-01		2	2
KM-13	S	7/1/2008	VANADIUM	4.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-15
Well Type: T
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-58

Confidence in Trend:
100.0%

Coefficient of Variation:
0.57

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

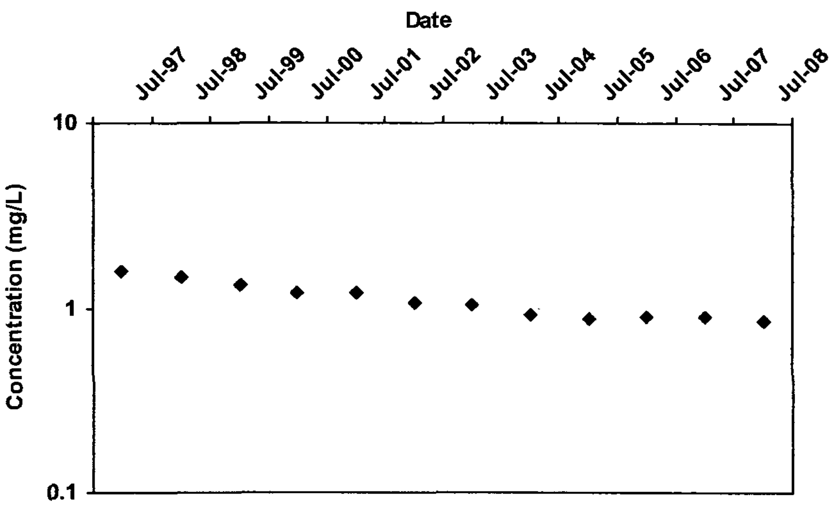
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-15	T	7/1/1997	MOLYBDENUM	1.7E+00		1	1
KM-15	T	7/1/1998	MOLYBDENUM	1.2E+00		2	2
KM-15	T	7/1/1999	MOLYBDENUM	8.6E-01		2	2
KM-15	T	7/1/2000	MOLYBDENUM	7.0E-01		2	2
KM-15	T	7/1/2001	MOLYBDENUM	6.4E-01		2	2
KM-15	T	7/1/2002	MOLYBDENUM	5.5E-01		2	2
KM-15	T	7/1/2003	MOLYBDENUM	4.9E-01		2	2
KM-15	T	7/1/2004	MOLYBDENUM	4.7E-01		2	2
KM-15	T	7/1/2005	MOLYBDENUM	4.7E-01		2	2
KM-15	T	7/1/2006	MOLYBDENUM	5.3E-01		2	2
KM-15	T	7/1/2007	MOLYBDENUM	4.1E-01		2	2
KM-15	T	7/1/2008	MOLYBDENUM	3.8E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-15
Well Type: T
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-62

Confidence in Trend:
100.0%

Coefficient of Variation:
0.22

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

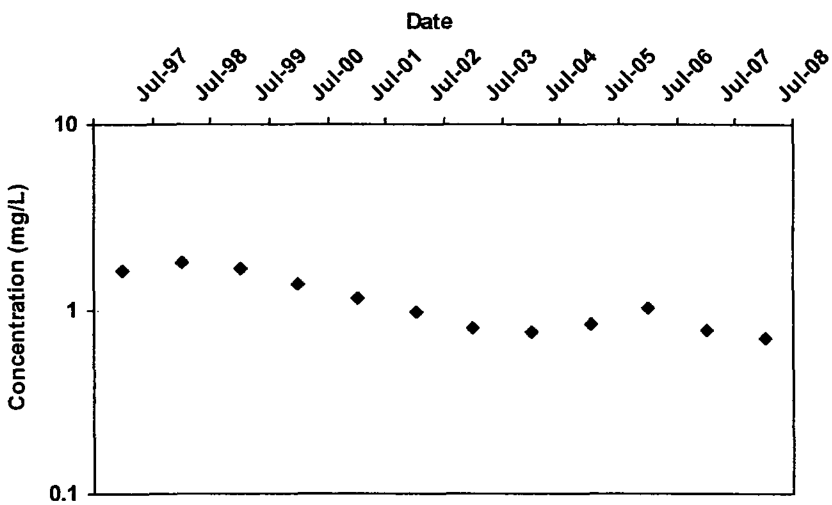
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-15	T	7/1/1997	VANADIUM	1.6E+00		1	1
KM-15	T	7/1/1998	VANADIUM	1.5E+00		2	2
KM-15	T	7/1/1999	VANADIUM	1.3E+00		2	2
KM-15	T	7/1/2000	VANADIUM	1.2E+00		2	2
KM-15	T	7/1/2001	VANADIUM	1.2E+00		2	2
KM-15	T	7/1/2002	VANADIUM	1.1E+00		2	2
KM-15	T	7/1/2003	VANADIUM	1.0E+00		2	2
KM-15	T	7/1/2004	VANADIUM	9.2E-01		2	2
KM-15	T	7/1/2005	VANADIUM	8.8E-01		2	2
KM-15	T	7/1/2006	VANADIUM	9.0E-01		2	2
KM-15	T	7/1/2007	VANADIUM	8.9E-01		2	2
KM-15	T	7/1/2008	VANADIUM	8.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-16
Well Type: T
COC: MOLYBDENUM

Time Period: 10/1/1997 to 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-48

Confidence in Trend:
100.0%

Coefficient of Variation:
0.36

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

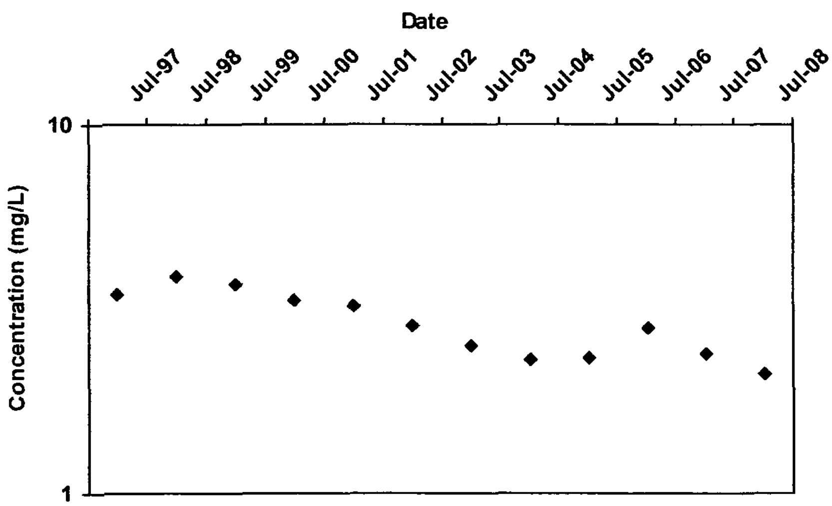
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-16	T	7/1/1997	MOLYBDENUM	1.6E+00		1	1
KM-16	T	7/1/1998	MOLYBDENUM	1.8E+00		2	2
KM-16	T	7/1/1999	MOLYBDENUM	1.7E+00		2	2
KM-16	T	7/1/2000	MOLYBDENUM	1.4E+00		2	2
KM-16	T	7/1/2001	MOLYBDENUM	1.1E+00		2	2
KM-16	T	7/1/2002	MOLYBDENUM	9.7E-01		2	2
KM-16	T	7/1/2003	MOLYBDENUM	7.9E-01		2	2
KM-16	T	7/1/2004	MOLYBDENUM	7.6E-01		2	2
KM-16	T	7/1/2005	MOLYBDENUM	8.3E-01		2	2
KM-16	T	7/1/2006	MOLYBDENUM	1.0E+00		2	2
KM-16	T	7/1/2007	MOLYBDENUM	7.6E-01		2	2
KM-16	T	7/1/2008	MOLYBDENUM	7.0E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-16
Well Type: T
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-50

Confidence in Trend:
100.0%

Coefficient of Variation:
0.21

Mann Kendall Concentration Trend: (See Note)
D

Data Table:

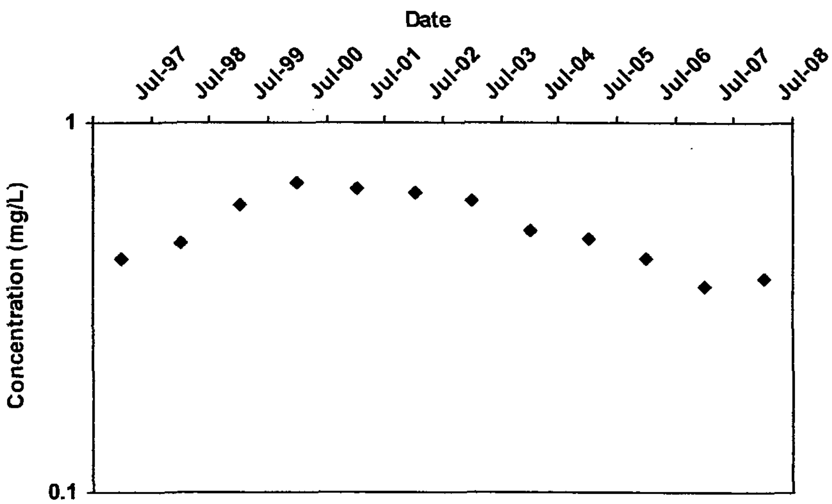
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-16	T	7/1/1997	VANADIUM	3.5E+00		1	1
KM-16	T	7/1/1998	VANADIUM	3.9E+00		2	2
KM-16	T	7/1/1999	VANADIUM	3.7E+00		2	2
KM-16	T	7/1/2000	VANADIUM	3.3E+00		2	2
KM-16	T	7/1/2001	VANADIUM	3.2E+00		2	2
KM-16	T	7/1/2002	VANADIUM	2.8E+00		2	2
KM-16	T	7/1/2003	VANADIUM	2.5E+00		2	2
KM-16	T	7/1/2004	VANADIUM	2.3E+00		2	2
KM-16	T	7/1/2005	VANADIUM	2.3E+00		2	2
KM-16	T	7/1/2006	VANADIUM	2.8E+00		2	2
KM-16	T	7/1/2007	VANADIUM	2.4E+00		2	2
KM-16	T	7/1/2008	VANADIUM	2.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-17
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic: -24

Confidence in Trend: 94.2%

Coefficient of Variation: 0.22

Mann Kendall Concentration Trend: (See Note) PD

Data Table:

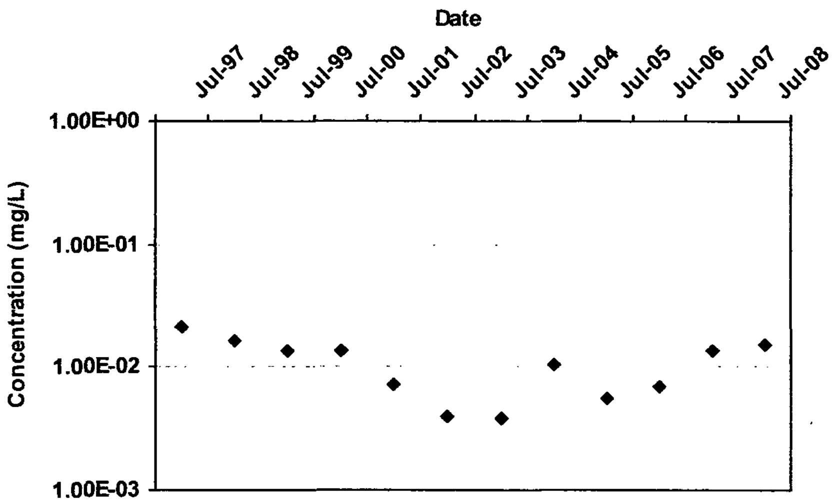
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-17	S	7/1/1997	MOLYBDENUM	4.3E-01		1	1
KM-17	S	7/1/1998	MOLYBDENUM	4.7E-01		2	2
KM-17	S	7/1/1999	MOLYBDENUM	6.0E-01		2	2
KM-17	S	7/1/2000	MOLYBDENUM	6.9E-01		2	2
KM-17	S	7/1/2001	MOLYBDENUM	6.6E-01		2	2
KM-17	S	7/1/2002	MOLYBDENUM	6.4E-01		2	2
KM-17	S	7/1/2003	MOLYBDENUM	6.2E-01		2	2
KM-17	S	7/1/2004	MOLYBDENUM	5.1E-01		2	2
KM-17	S	7/1/2005	MOLYBDENUM	4.8E-01		2	2
KM-17	S	7/1/2006	MOLYBDENUM	4.3E-01		2	2
KM-17	S	7/1/2007	MOLYBDENUM	3.6E-01		2	2
KM-17	S	7/1/2008	MOLYBDENUM	3.8E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Mann-Kendall Statistics Summary

Well: KM-17
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



Mann Kendall S Statistic:
-20

Confidence in Trend:
90.2%

Coefficient of Variation:
0.50

Mann Kendall Concentration Trend: (See Note)
PD

Data Table:

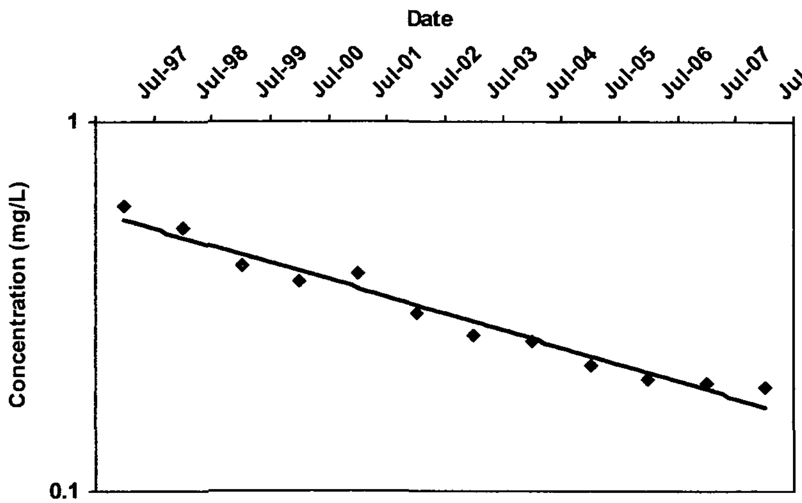
Well	Well Type	Effective Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-17	S	7/1/1997	VANADIUM	2.1E-02		1	1
KM-17	S	7/1/1998	VANADIUM	1.7E-02		1	1
KM-17	S	7/1/1999	VANADIUM	1.3E-02		2	2
KM-17	S	7/1/2000	VANADIUM	1.3E-02		2	2
KM-17	S	7/1/2001	VANADIUM	7.3E-03		2	2
KM-17	S	7/1/2002	VANADIUM	4.0E-03		2	2
KM-17	S	7/1/2003	VANADIUM	3.8E-03		2	2
KM-17	S	7/1/2004	VANADIUM	1.1E-02		2	2
KM-17	S	7/1/2005	VANADIUM	5.6E-03		2	2
KM-17	S	7/1/2006	VANADIUM	7.0E-03		2	2
KM-17	S	7/1/2007	VANADIUM	1.3E-02		2	2
KM-17	S	7/1/2008	VANADIUM	1.5E-02		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect

MAROS Linear Regression Statistics

Well: Finch Spring
Well Type: T
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.41

Confidence in Trend: 100.0%

Ln Slope: -2.9E-04

LR Concentration Trend: D

Consolidation Data Table:

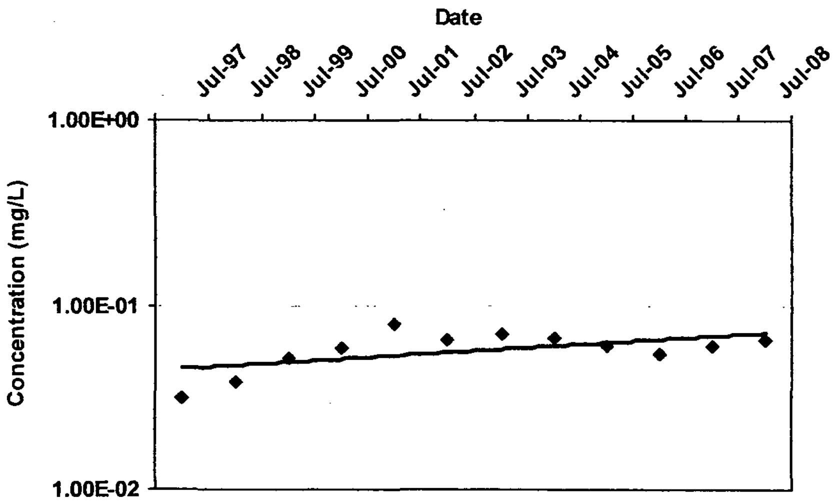
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
Finch Spring	T	7/1/1997	MOLYBDENUM	5.9E-01		1	1
Finch Spring	T	7/1/1998	MOLYBDENUM	5.2E-01		2	2
Finch Spring	T	7/1/1999	MOLYBDENUM	4.1E-01		2	2
Finch Spring	T	7/1/2000	MOLYBDENUM	3.7E-01		2	2
Finch Spring	T	7/1/2001	MOLYBDENUM	3.9E-01		2	2
Finch Spring	T	7/1/2002	MOLYBDENUM	3.0E-01		2	2
Finch Spring	T	7/1/2003	MOLYBDENUM	2.6E-01		2	2
Finch Spring	T	7/1/2004	MOLYBDENUM	2.5E-01		2	2
Finch Spring	T	7/1/2005	MOLYBDENUM	2.2E-01		2	2
Finch Spring	T	7/1/2006	MOLYBDENUM	2.0E-01		2	2
Finch Spring	T	7/1/2007	MOLYBDENUM	1.9E-01		2	2
Finch Spring	T	7/1/2008	MOLYBDENUM	1.9E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: *Finch Spring*
Well Type: T
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.22

Confidence in Trend: 97.7%

Ln Slope: 1.1E-04

LR Concentration Trend: I

Consolidation Data Table:

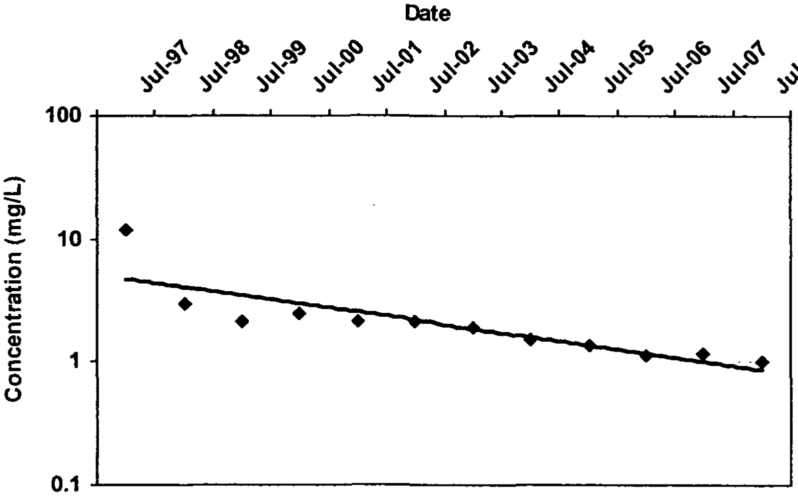
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
Finch Spring	T	7/1/1997	VANADIUM	3.2E-02		1	1
Finch Spring	T	7/1/1998	VANADIUM	3.9E-02		2	2
Finch Spring	T	7/1/1999	VANADIUM	5.2E-02		2	2
Finch Spring	T	7/1/2000	VANADIUM	5.9E-02		2	2
Finch Spring	T	7/1/2001	VANADIUM	7.8E-02		2	2
Finch Spring	T	7/1/2002	VANADIUM	6.5E-02		2	2
Finch Spring	T	7/1/2003	VANADIUM	6.9E-02		2	2
Finch Spring	T	7/1/2004	VANADIUM	6.5E-02		2	2
Finch Spring	T	7/1/2005	VANADIUM	6.0E-02		2	2
Finch Spring	T	7/1/2006	VANADIUM	5.4E-02		2	2
Finch Spring	T	7/1/2007	VANADIUM	5.9E-02		2	2
Finch Spring	T	7/1/2008	VANADIUM	6.4E-02		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-2
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 1.11

Confidence in Trend: 100.0%

Ln Slope: -4.2E-04

LR Concentration Trend: D

Consolidation Data Table:

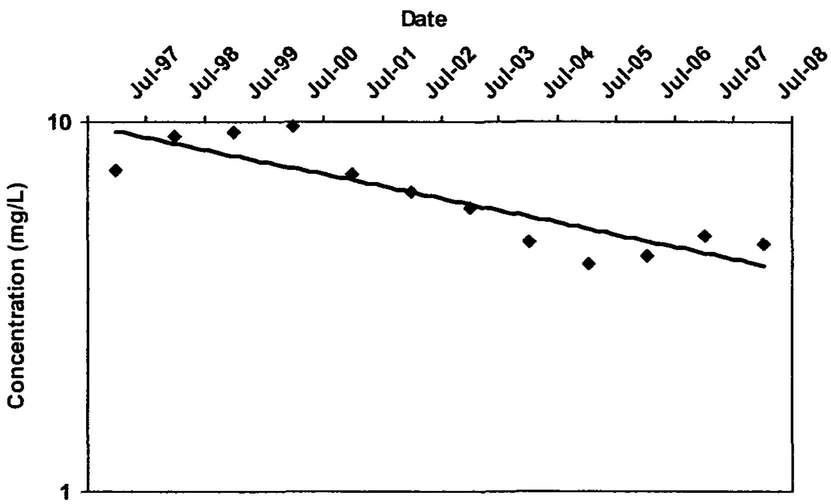
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-2	S	7/1/1997	MOLYBDENUM	1.2E+01		1	1
KM-2	S	7/1/1998	MOLYBDENUM	2.9E+00		2	2
KM-2	S	7/1/1999	MOLYBDENUM	2.1E+00		2	2
KM-2	S	7/1/2000	MOLYBDENUM	2.5E+00		2	2
KM-2	S	7/1/2001	MOLYBDENUM	2.1E+00		2	2
KM-2	S	7/1/2002	MOLYBDENUM	2.2E+00		2	2
KM-2	S	7/1/2003	MOLYBDENUM	1.9E+00		2	2
KM-2	S	7/1/2004	MOLYBDENUM	1.5E+00		2	2
KM-2	S	7/1/2005	MOLYBDENUM	1.3E+00		2	2
KM-2	S	7/1/2006	MOLYBDENUM	1.1E+00		2	2
KM-2	S	7/1/2007	MOLYBDENUM	1.2E+00		2	2
KM-2	S	7/1/2008	MOLYBDENUM	1.0E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-2
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.32

Confidence in Trend: 100.0%

Ln Slope: -2.1E-04

LR Concentration Trend: D

Consolidation Data Table:

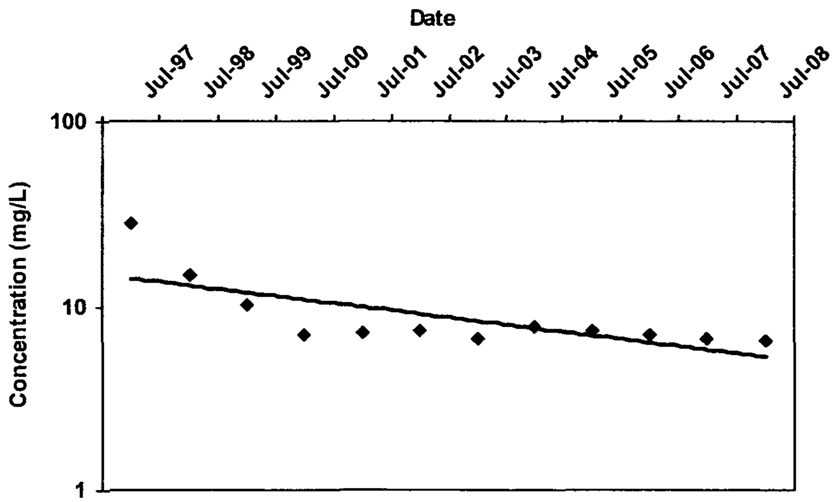
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-2	S	7/1/1997	VANADIUM	7.5E+00		1	1
KM-2	S	7/1/1998	VANADIUM	9.2E+00		2	2
KM-2	S	7/1/1999	VANADIUM	9.4E+00		2	2
KM-2	S	7/1/2000	VANADIUM	9.8E+00		2	2
KM-2	S	7/1/2001	VANADIUM	7.2E+00		2	2
KM-2	S	7/1/2002	VANADIUM	6.4E+00		2	2
KM-2	S	7/1/2003	VANADIUM	5.9E+00		2	2
KM-2	S	7/1/2004	VANADIUM	4.8E+00		2	2
KM-2	S	7/1/2005	VANADIUM	4.1E+00		2	2
KM-2	S	7/1/2006	VANADIUM	4.3E+00		2	2
KM-2	S	7/1/2007	VANADIUM	4.9E+00		2	2
KM-2	S	7/1/2008	VANADIUM	4.7E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-3
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.64

Confidence in Trend: 99.7%

Ln Slope: -2.4E-04

LR Concentration Trend: D

Consolidation Data Table:

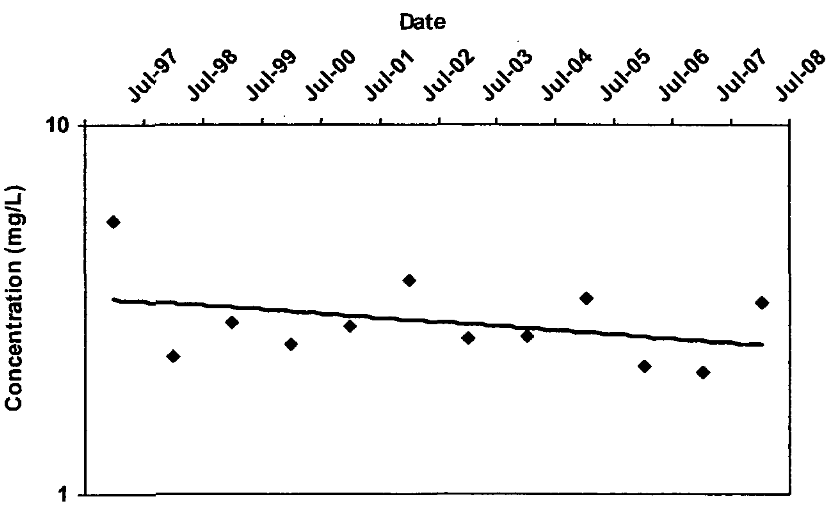
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-3	S	7/1/1997	MOLYBDENUM	2.8E+01		1	1
KM-3	S	7/1/1998	MOLYBDENUM	1.5E+01		2	2
KM-3	S	7/1/1999	MOLYBDENUM	1.0E+01		2	2
KM-3	S	7/1/2000	MOLYBDENUM	7.0E+00		2	2
KM-3	S	7/1/2001	MOLYBDENUM	7.1E+00		2	2
KM-3	S	7/1/2002	MOLYBDENUM	7.3E+00		2	2
KM-3	S	7/1/2003	MOLYBDENUM	6.7E+00		2	2
KM-3	S	7/1/2004	MOLYBDENUM	7.7E+00		2	2
KM-3	S	7/1/2005	MOLYBDENUM	7.3E+00		2	2
KM-3	S	7/1/2006	MOLYBDENUM	7.0E+00		2	2
KM-3	S	7/1/2007	MOLYBDENUM	6.6E+00		2	2
KM-3	S	7/1/2008	MOLYBDENUM	6.5E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-3
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.30

Confidence in Trend: 87.4%

Ln Slope: -7.1E-05

LR Concentration Trend: S

Consolidation Data Table:

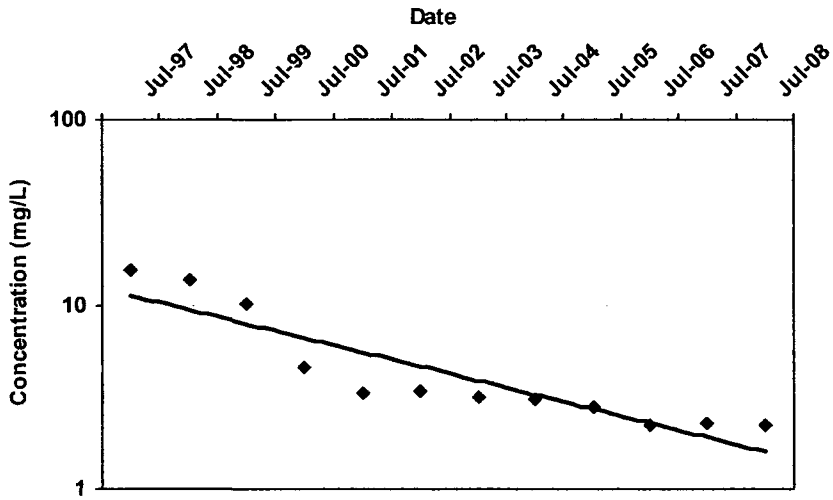
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-3	S	7/1/1997	VANADIUM	5.5E+00		1	1
KM-3	S	7/1/1998	VANADIUM	2.3E+00		2	2
KM-3	S	7/1/1999	VANADIUM	2.9E+00		2	2
KM-3	S	7/1/2000	VANADIUM	2.6E+00		2	2
KM-3	S	7/1/2001	VANADIUM	2.8E+00		2	2
KM-3	S	7/1/2002	VANADIUM	3.8E+00		2	2
KM-3	S	7/1/2003	VANADIUM	2.6E+00		2	2
KM-3	S	7/1/2004	VANADIUM	2.7E+00		2	2
KM-3	S	7/1/2005	VANADIUM	3.4E+00		2	2
KM-3	S	7/1/2006	VANADIUM	2.2E+00		2	2
KM-3	S	7/1/2007	VANADIUM	2.1E+00		2	2
KM-3	S	7/1/2008	VANADIUM	3.3E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-4
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.86

Confidence in Trend: 100.0%

Ln Slope: -4.9E-04

LR Concentration Trend: D

Consolidation Data Table:

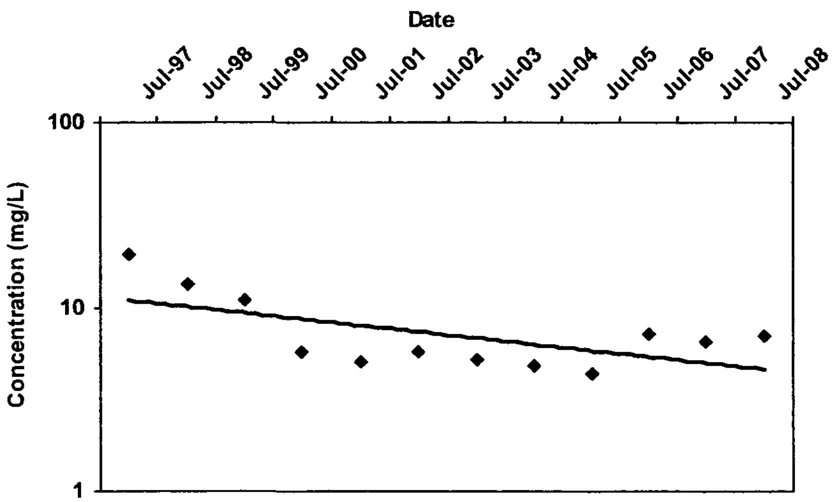
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-4	S	7/1/1997	MOLYBDENUM	1.5E+01		1	1
KM-4	S	7/1/1998	MOLYBDENUM	1.4E+01		2	2
KM-4	S	7/1/1999	MOLYBDENUM	1.0E+01		2	2
KM-4	S	7/1/2000	MOLYBDENUM	4.6E+00		2	2
KM-4	S	7/1/2001	MOLYBDENUM	3.3E+00		2	2
KM-4	S	7/1/2002	MOLYBDENUM	3.4E+00		2	2
KM-4	S	7/1/2003	MOLYBDENUM	3.1E+00		2	2
KM-4	S	7/1/2004	MOLYBDENUM	3.1E+00		2	2
KM-4	S	7/1/2005	MOLYBDENUM	2.7E+00		2	2
KM-4	S	7/1/2006	MOLYBDENUM	2.2E+00		2	2
KM-4	S	7/1/2007	MOLYBDENUM	2.3E+00		2	2
KM-4	S	7/1/2008	MOLYBDENUM	2.2E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-4
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.56

Confidence in Trend: 98.4%

Ln Slope: -2.1E-04

LR Concentration Trend: D

Consolidation Data Table:

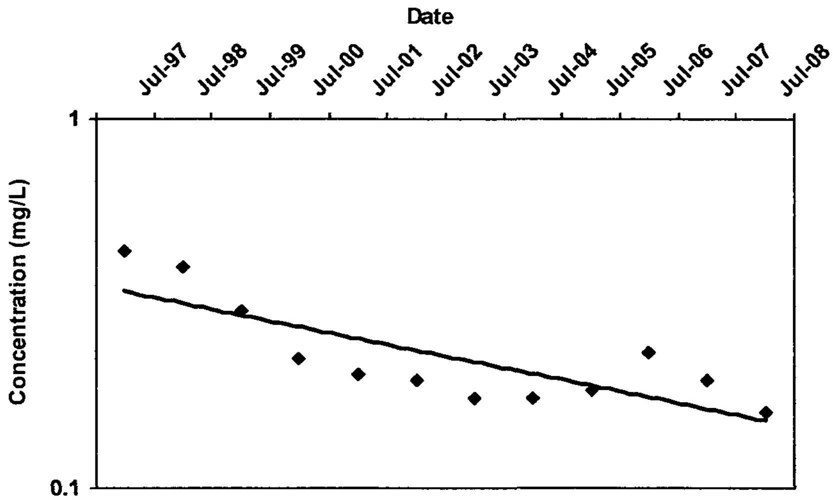
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-4	S	7/1/1997	VANADIUM	1.9E+01		1	1
KM-4	S	7/1/1998	VANADIUM	1.3E+01		2	2
KM-4	S	7/1/1999	VANADIUM	1.1E+01		2	2
KM-4	S	7/1/2000	VANADIUM	5.7E+00		2	2
KM-4	S	7/1/2001	VANADIUM	5.0E+00		2	2
KM-4	S	7/1/2002	VANADIUM	5.7E+00		2	2
KM-4	S	7/1/2003	VANADIUM	5.2E+00		2	2
KM-4	S	7/1/2004	VANADIUM	4.8E+00		2	2
KM-4	S	7/1/2005	VANADIUM	4.3E+00		2	2
KM-4	S	7/1/2006	VANADIUM	7.1E+00		2	2
KM-4	S	7/1/2007	VANADIUM	6.4E+00		2	2
KM-4	S	7/1/2008	VANADIUM	6.9E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-5
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.38

Confidence in Trend: 99.9%

Ln Slope: -2.0E-04

LR Concentration Trend: D

Consolidation Data Table:

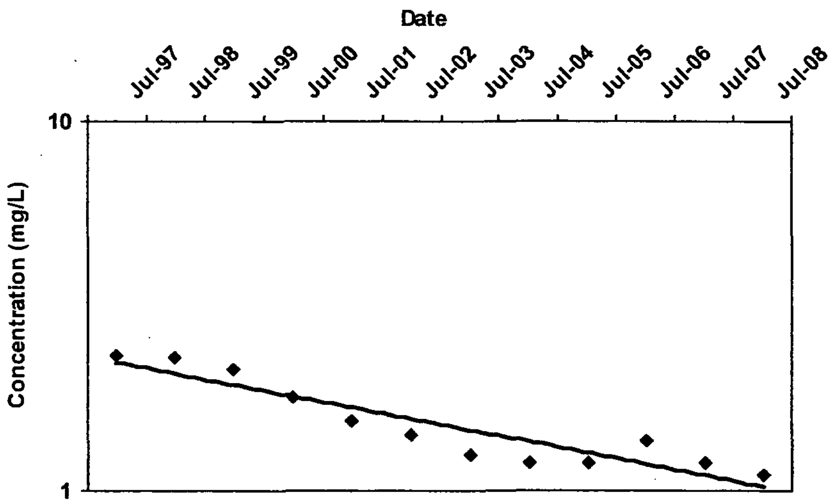
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-5	S	7/1/1997	MOLYBDENUM	4.4E-01		1	1
KM-5	S	7/1/1998	MOLYBDENUM	4.0E-01		2	2
KM-5	S	7/1/1999	MOLYBDENUM	3.0E-01		2	2
KM-5	S	7/1/2000	MOLYBDENUM	2.3E-01		2	2
KM-5	S	7/1/2001	MOLYBDENUM	2.0E-01		2	2
KM-5	S	7/1/2002	MOLYBDENUM	1.9E-01		2	2
KM-5	S	7/1/2003	MOLYBDENUM	1.7E-01		2	2
KM-5	S	7/1/2004	MOLYBDENUM	1.7E-01		2	2
KM-5	S	7/1/2005	MOLYBDENUM	1.8E-01		2	2
KM-5	S	7/1/2006	MOLYBDENUM	2.3E-01		2	2
KM-5	S	7/1/2007	MOLYBDENUM	1.9E-01		2	2
KM-5	S	7/1/2008	MOLYBDENUM	1.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-5
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.29

Confidence in Trend: 100.0%

Ln Slope: -1.9E-04

LR Concentration Trend: D

Consolidation Data Table:

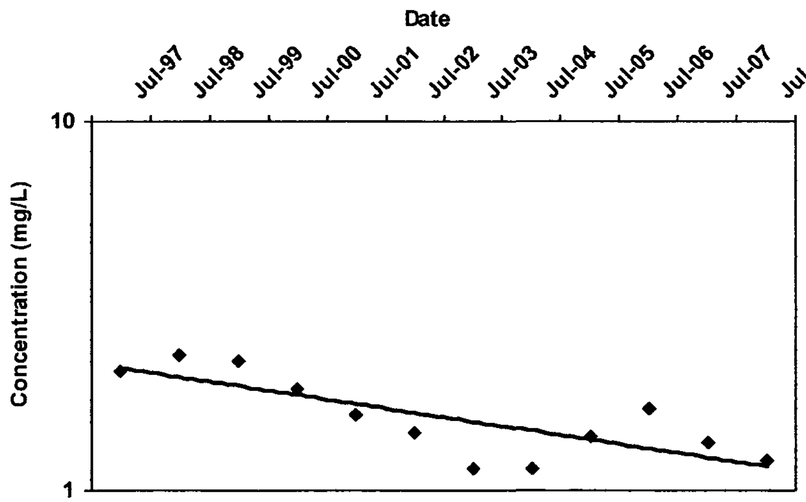
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-5	S	7/1/1997	VANADIUM	2.3E+00		1	1
KM-5	S	7/1/1998	VANADIUM	2.3E+00		2	2
KM-5	S	7/1/1999	VANADIUM	2.1E+00		2	2
KM-5	S	7/1/2000	VANADIUM	1.8E+00		2	2
KM-5	S	7/1/2001	VANADIUM	1.5E+00		2	2
KM-5	S	7/1/2002	VANADIUM	1.4E+00		2	2
KM-5	S	7/1/2003	VANADIUM	1.2E+00		2	2
KM-5	S	7/1/2004	VANADIUM	1.2E+00		2	2
KM-5	S	7/1/2005	VANADIUM	1.2E+00		2	2
KM-5	S	7/1/2006	VANADIUM	1.4E+00		2	2
KM-5	S	7/1/2007	VANADIUM	1.2E+00		2	2
KM-5	S	7/1/2008	VANADIUM	1.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-6
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.26

Confidence in Trend: 99.9%

Ln Slope: -1.5E-04

LR Concentration Trend: D

Consolidation Data Table:

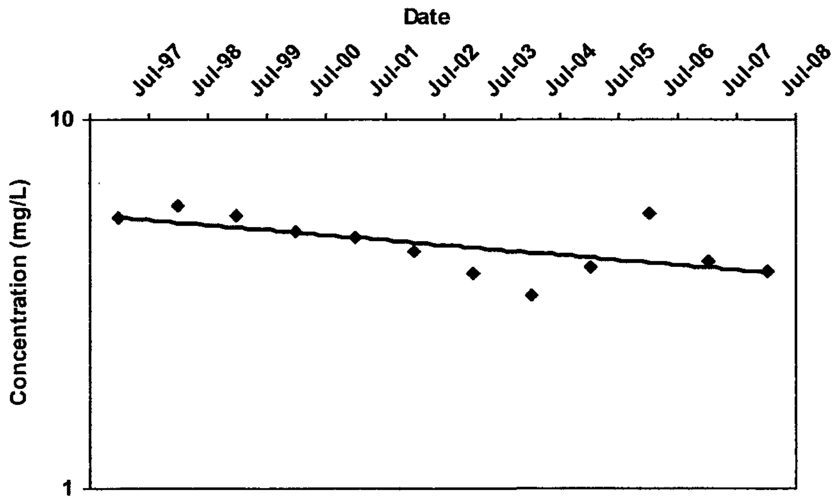
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-6	S	7/1/1997	MOLYBDENUM	2.1E+00		1	1
KM-6	S	7/1/1998	MOLYBDENUM	2.3E+00		2	2
KM-6	S	7/1/1999	MOLYBDENUM	2.3E+00		2	2
KM-6	S	7/1/2000	MOLYBDENUM	1.9E+00		2	2
KM-6	S	7/1/2001	MOLYBDENUM	1.6E+00		2	2
KM-6	S	7/1/2002	MOLYBDENUM	1.4E+00		2	2
KM-6	S	7/1/2003	MOLYBDENUM	1.1E+00		2	2
KM-6	S	7/1/2004	MOLYBDENUM	1.1E+00		2	2
KM-6	S	7/1/2005	MOLYBDENUM	1.4E+00		2	2
KM-6	S	7/1/2006	MOLYBDENUM	1.7E+00		2	2
KM-6	S	7/1/2007	MOLYBDENUM	1.3E+00		2	2
KM-6	S	7/1/2008	MOLYBDENUM	1.2E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-6
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.18

Confidence in Trend: 98.5%

Ln Slope: -8.5E-05

LR Concentration Trend: D

Consolidation Data Table:

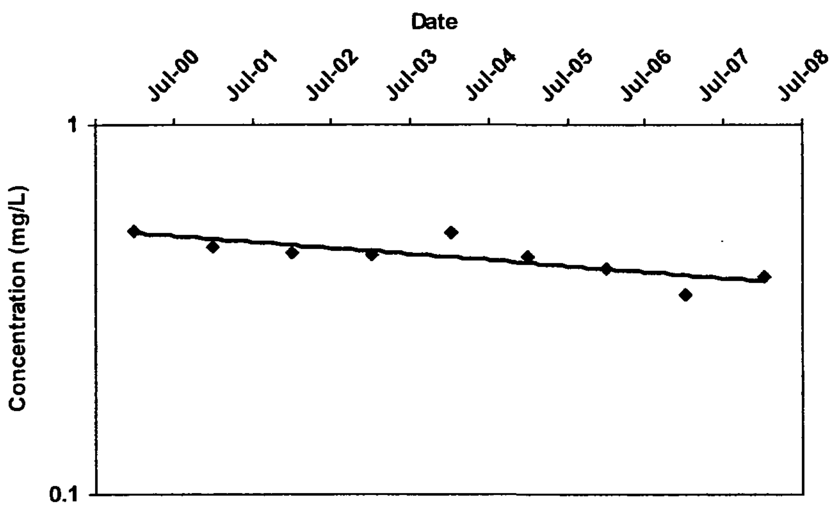
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-6	S	7/1/1997	VANADIUM	5.4E+00		1	1
KM-6	S	7/1/1998	VANADIUM	5.9E+00		2	2
KM-6	S	7/1/1999	VANADIUM	5.5E+00		2	2
KM-6	S	7/1/2000	VANADIUM	5.0E+00		2	2
KM-6	S	7/1/2001	VANADIUM	4.8E+00		2	2
KM-6	S	7/1/2002	VANADIUM	4.4E+00		2	2
KM-6	S	7/1/2003	VANADIUM	3.8E+00		2	2
KM-6	S	7/1/2004	VANADIUM	3.3E+00		2	2
KM-6	S	7/1/2005	VANADIUM	4.0E+00		2	2
KM-6	S	7/1/2006	VANADIUM	5.6E+00		2	2
KM-6	S	7/1/2007	VANADIUM	4.1E+00		2	2
KM-6	S	7/1/2008	VANADIUM	3.9E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-7
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.12

Confidence in Trend: 99.6%

Ln Slope: -1.0E-04

LR Concentration Trend: D

Consolidation Data Table:

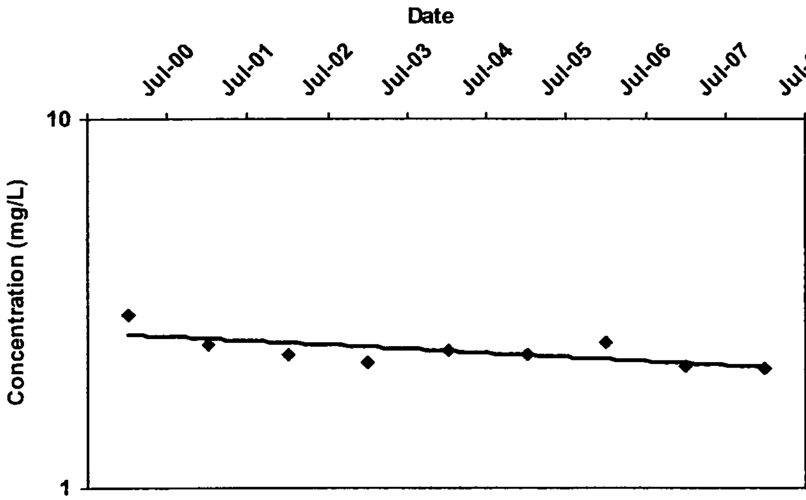
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-7	S	7/1/2000	MOLYBDENUM	5.2E-01		2	2
KM-7	S	7/1/2001	MOLYBDENUM	4.7E-01		2	2
KM-7	S	7/1/2002	MOLYBDENUM	4.5E-01		2	2
KM-7	S	7/1/2003	MOLYBDENUM	4.4E-01		2	2
KM-7	S	7/1/2004	MOLYBDENUM	5.1E-01		2	2
KM-7	S	7/1/2005	MOLYBDENUM	4.4E-01		2	2
KM-7	S	7/1/2006	MOLYBDENUM	4.1E-01		2	2
KM-7	S	7/1/2007	MOLYBDENUM	3.5E-01		2	2
KM-7	S	7/1/2008	MOLYBDENUM	3.9E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-7
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.11

Confidence in Trend: 98.2%

Ln Slope: -7.0E-05

LR Concentration Trend: D

Consolidation Data Table:

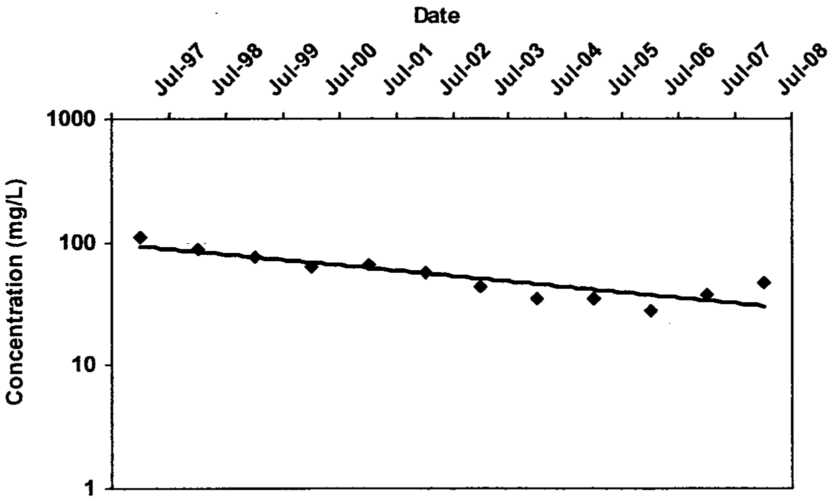
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-7	S	7/1/2000	VANADIUM	2.9E+00		2	2
KM-7	S	7/1/2001	VANADIUM	2.5E+00		2	2
KM-7	S	7/1/2002	VANADIUM	2.3E+00		2	2
KM-7	S	7/1/2003	VANADIUM	2.2E+00		2	2
KM-7	S	7/1/2004	VANADIUM	2.3E+00		2	2
KM-7	S	7/1/2005	VANADIUM	2.3E+00		2	2
KM-7	S	7/1/2006	VANADIUM	2.5E+00		2	2
KM-7	S	7/1/2007	VANADIUM	2.1E+00		2	2
KM-7	S	7/1/2008	VANADIUM	2.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-8
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.43

Confidence in Trend: 100.0%

Ln Slope: -2.8E-04

LR Concentration Trend: D

Consolidation Data Table:

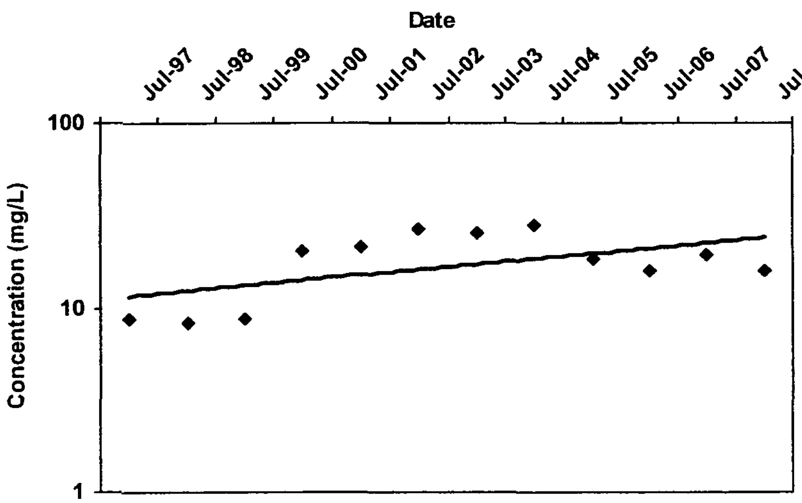
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-8	S	7/1/1997	MOLYBDENUM	1.1E+02		1	1
KM-8	S	7/1/1998	MOLYBDENUM	8.8E+01		2	2
KM-8	S	7/1/1999	MOLYBDENUM	7.7E+01		2	2
KM-8	S	7/1/2000	MOLYBDENUM	6.4E+01		2	2
KM-8	S	7/1/2001	MOLYBDENUM	6.6E+01		2	2
KM-8	S	7/1/2002	MOLYBDENUM	5.7E+01		2	2
KM-8	S	7/1/2003	MOLYBDENUM	4.3E+01		2	2
KM-8	S	7/1/2004	MOLYBDENUM	3.5E+01		2	2
KM-8	S	7/1/2005	MOLYBDENUM	3.5E+01		2	2
KM-8	S	7/1/2006	MOLYBDENUM	2.8E+01		2	2
KM-8	S	7/1/2007	MOLYBDENUM	3.8E+01		2	2
KM-8	S	7/1/2008	MOLYBDENUM	4.7E+01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-8
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.38

Confidence in Trend: 96.5%

Ln Slope: 1.8E-04

LR Concentration Trend: I

Consolidation Data Table:

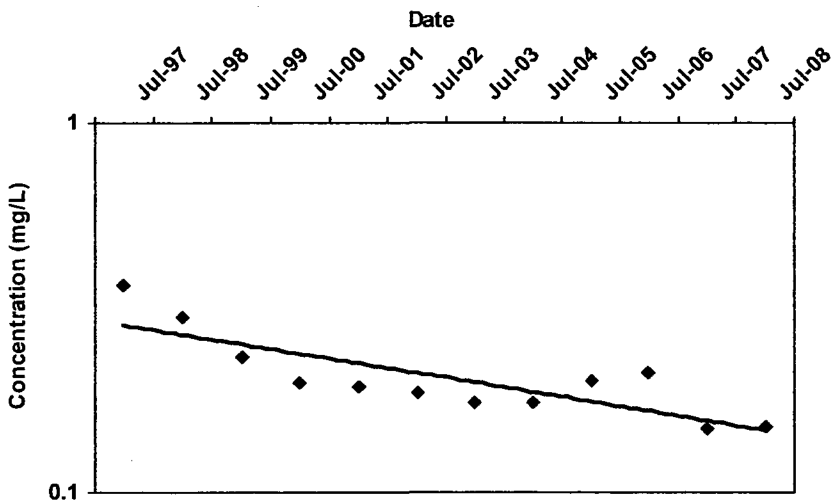
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-8	S	7/1/1997	VANADIUM	8.8E+00		1	1
KM-8	S	7/1/1998	VANADIUM	8.3E+00		2	2
KM-8	S	7/1/1999	VANADIUM	8.6E+00		2	2
KM-8	S	7/1/2000	VANADIUM	2.0E+01		2	2
KM-8	S	7/1/2001	VANADIUM	2.1E+01		2	2
KM-8	S	7/1/2002	VANADIUM	2.7E+01		2	2
KM-8	S	7/1/2003	VANADIUM	2.5E+01		2	2
KM-8	S	7/1/2004	VANADIUM	2.8E+01		2	2
KM-8	S	7/1/2005	VANADIUM	1.8E+01		2	2
KM-8	S	7/1/2006	VANADIUM	1.6E+01		2	2
KM-8	S	7/1/2007	VANADIUM	1.9E+01		2	2
KM-8	S	7/1/2008	VANADIUM	1.6E+01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-9
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.30

Confidence in Trend: 99.9%

Ln Slope: -1.6E-04

LR Concentration Trend: D

Consolidation Data Table:

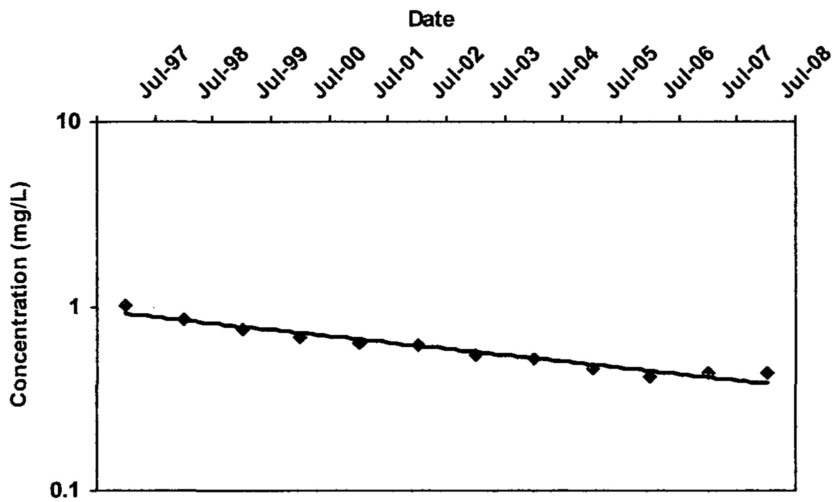
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-9	S	7/1/1997	MOLYBDENUM	3.6E-01		1	1
KM-9	S	7/1/1998	MOLYBDENUM	3.0E-01		2	2
KM-9	S	7/1/1999	MOLYBDENUM	2.3E-01		2	2
KM-9	S	7/1/2000	MOLYBDENUM	2.0E-01		2	2
KM-9	S	7/1/2001	MOLYBDENUM	1.9E-01		2	2
KM-9	S	7/1/2002	MOLYBDENUM	1.9E-01		2	2
KM-9	S	7/1/2003	MOLYBDENUM	1.7E-01		2	2
KM-9	S	7/1/2004	MOLYBDENUM	1.7E-01		2	2
KM-9	S	7/1/2005	MOLYBDENUM	2.0E-01		2	2
KM-9	S	7/1/2006	MOLYBDENUM	2.1E-01		2	2
KM-9	S	7/1/2007	MOLYBDENUM	1.5E-01		2	2
KM-9	S	7/1/2008	MOLYBDENUM	1.5E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-9
Well Type: S
COC: VANADIUM

Time Period: *10/1/1997* ***to*** *5/10/2008*
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.31

Confidence in Trend: 100.0%

Ln Slope: -2.2E-04

LR Concentration Trend: D

Consolidation Data Table:

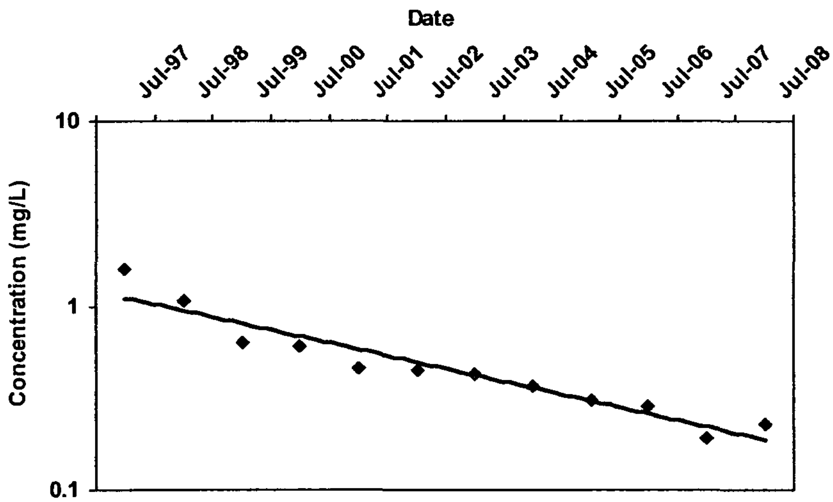
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-9	S	7/1/1997	VANADIUM	1.0E+00		1	1
KM-9	S	7/1/1998	VANADIUM	8.6E-01		2	2
KM-9	S	7/1/1999	VANADIUM	7.6E-01		2	2
KM-9	S	7/1/2000	VANADIUM	6.8E-01		2	2
KM-9	S	7/1/2001	VANADIUM	6.3E-01		2	2
KM-9	S	7/1/2002	VANADIUM	6.2E-01		2	2
KM-9	S	7/1/2003	VANADIUM	5.4E-01		2	2
KM-9	S	7/1/2004	VANADIUM	5.2E-01		2	2
KM-9	S	7/1/2005	VANADIUM	4.5E-01		2	2
KM-9	S	7/1/2006	VANADIUM	4.1E-01		2	2
KM-9	S	7/1/2007	VANADIUM	4.3E-01		2	2
KM-9	S	7/1/2008	VANADIUM	4.3E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-13
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.73

Confidence in Trend: 100.0%

Ln Slope: -4.4E-04

LR Concentration Trend: D

Consolidation Data Table:

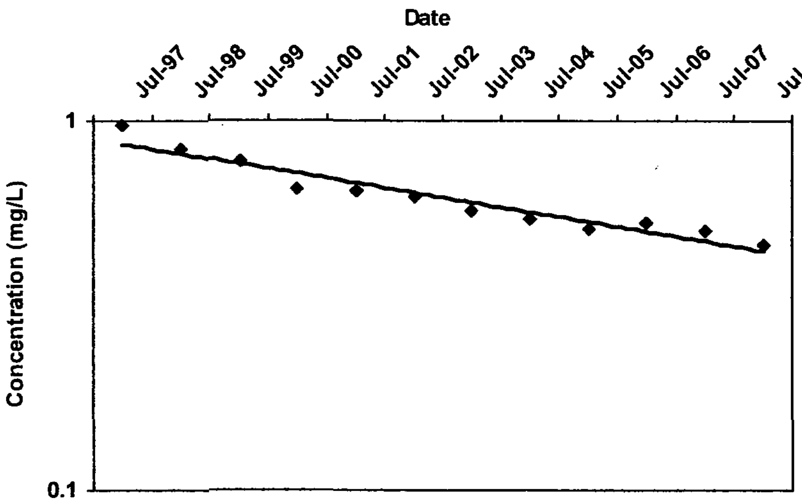
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-13	S	7/1/1997	MOLYBDENUM	1.6E+00		1	1
KM-13	S	7/1/1998	MOLYBDENUM	1.1E+00		2	2
KM-13	S	7/1/1999	MOLYBDENUM	6.3E-01		2	2
KM-13	S	7/1/2000	MOLYBDENUM	6.0E-01		2	2
KM-13	S	7/1/2001	MOLYBDENUM	4.6E-01		2	2
KM-13	S	7/1/2002	MOLYBDENUM	4.4E-01		2	2
KM-13	S	7/1/2003	MOLYBDENUM	4.2E-01		2	2
KM-13	S	7/1/2004	MOLYBDENUM	3.6E-01		2	2
KM-13	S	7/1/2005	MOLYBDENUM	3.1E-01		2	2
KM-13	S	7/1/2006	MOLYBDENUM	2.8E-01		2	2
KM-13	S	7/1/2007	MOLYBDENUM	1.9E-01		2	2
KM-13	S	7/1/2008	MOLYBDENUM	2.3E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-13
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.24

Confidence in Trend: 100.0%

Ln Slope: -1.7E-04

LR Concentration Trend: D

Consolidation Data Table:

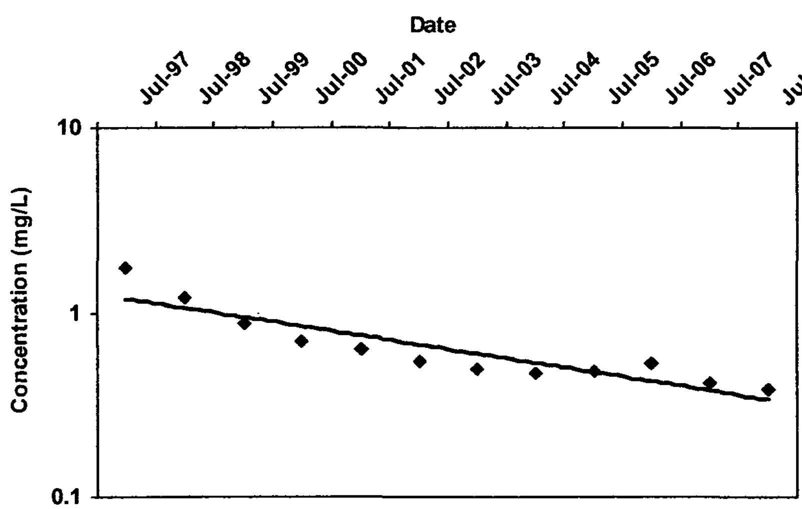
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-13	S	7/1/1997	VANADIUM	9.7E-01		1	1
KM-13	S	7/1/1998	VANADIUM	8.3E-01		2	2
KM-13	S	7/1/1999	VANADIUM	7.8E-01		2	2
KM-13	S	7/1/2000	VANADIUM	6.5E-01		2	2
KM-13	S	7/1/2001	VANADIUM	6.5E-01		2	2
KM-13	S	7/1/2002	VANADIUM	6.2E-01		2	2
KM-13	S	7/1/2003	VANADIUM	5.7E-01		2	2
KM-13	S	7/1/2004	VANADIUM	5.4E-01		2	2
KM-13	S	7/1/2005	VANADIUM	5.1E-01		2	2
KM-13	S	7/1/2006	VANADIUM	5.3E-01		2	2
KM-13	S	7/1/2007	VANADIUM	5.0E-01		2	2
KM-13	S	7/1/2008	VANADIUM	4.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-15
Well Type: T
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.57

Confidence in Trend: 100.0%

Ln Slope: -3.1E-04

LR Concentration Trend: D

Consolidation Data Table:

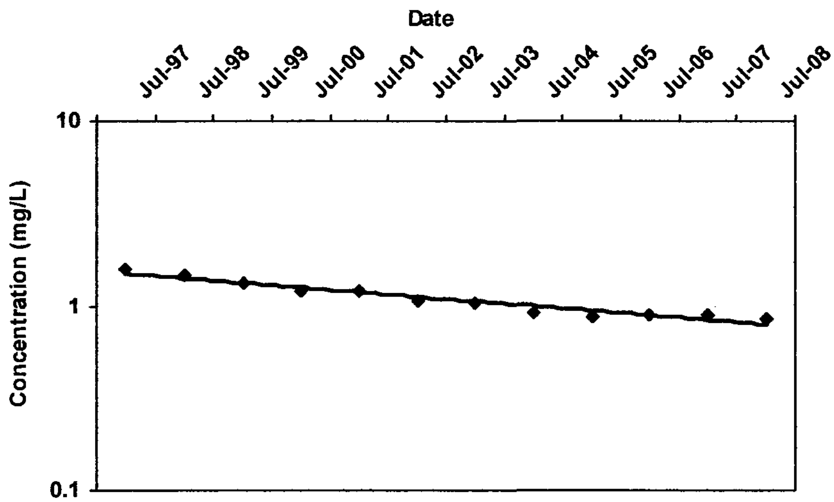
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-15	T	7/1/1997	MOLYBDENUM	1.7E+00		1	1
KM-15	T	7/1/1998	MOLYBDENUM	1.2E+00		2	2
KM-15	T	7/1/1999	MOLYBDENUM	8.6E-01		2	2
KM-15	T	7/1/2000	MOLYBDENUM	7.0E-01		2	2
KM-15	T	7/1/2001	MOLYBDENUM	6.4E-01		2	2
KM-15	T	7/1/2002	MOLYBDENUM	5.5E-01		2	2
KM-15	T	7/1/2003	MOLYBDENUM	4.9E-01		2	2
KM-15	T	7/1/2004	MOLYBDENUM	4.7E-01		2	2
KM-15	T	7/1/2005	MOLYBDENUM	4.7E-01		2	2
KM-15	T	7/1/2006	MOLYBDENUM	5.3E-01		2	2
KM-15	T	7/1/2007	MOLYBDENUM	4.1E-01		2	2
KM-15	T	7/1/2008	MOLYBDENUM	3.8E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-15
Well Type: T
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.22

Confidence in Trend: 100.0%

Ln Slope: -1.6E-04

LR Concentration Trend: D

Consolidation Data Table:

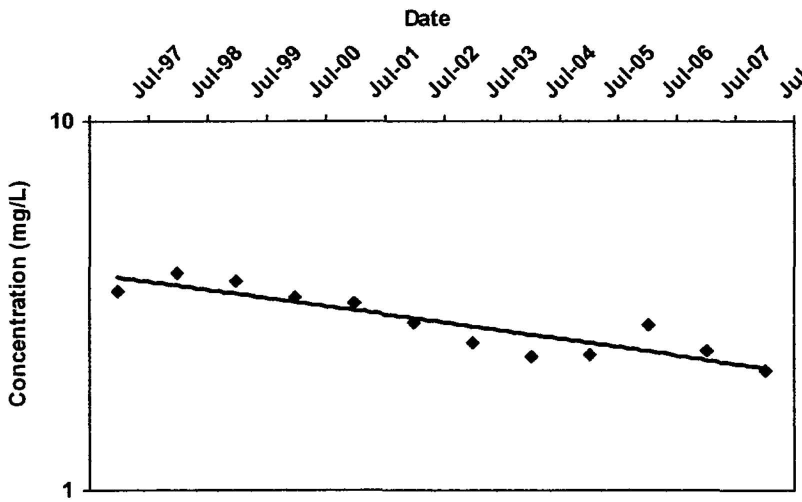
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-15	T	7/1/1997	VANADIUM	1.6E+00		1	1
KM-15	T	7/1/1998	VANADIUM	1.5E+00		2	2
KM-15	T	7/1/1999	VANADIUM	1.3E+00		2	2
KM-15	T	7/1/2000	VANADIUM	1.2E+00		2	2
KM-15	T	7/1/2001	VANADIUM	1.2E+00		2	2
KM-15	T	7/1/2002	VANADIUM	1.1E+00		2	2
KM-15	T	7/1/2003	VANADIUM	1.0E+00		2	2
KM-15	T	7/1/2004	VANADIUM	9.2E-01		2	2
KM-15	T	7/1/2005	VANADIUM	8.8E-01		2	2
KM-15	T	7/1/2006	VANADIUM	9.0E-01		2	2
KM-15	T	7/1/2007	VANADIUM	8.9E-01		2	2
KM-15	T	7/1/2008	VANADIUM	8.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-16
Well Type: T
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.21

Confidence in Trend: 100.0%

Ln Slope: -1.4E-04

LR Concentration Trend: D

Consolidation Data Table:

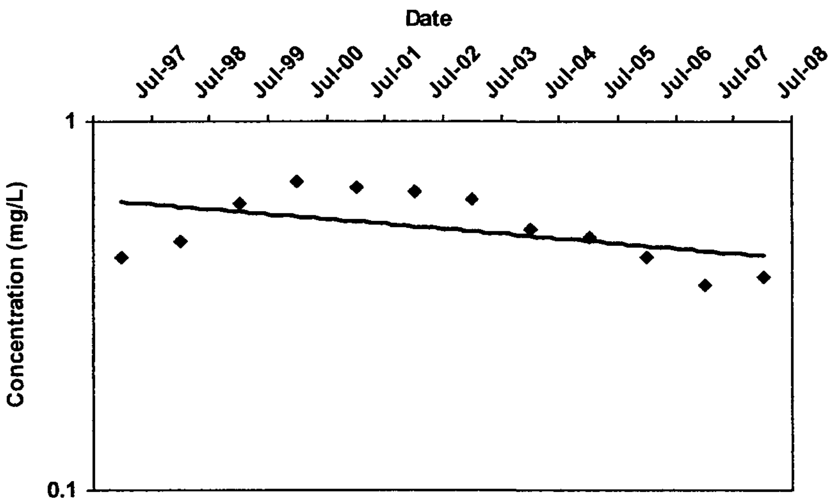
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-16	T	7/1/1997	VANADIUM	3.5E+00		1	1
KM-16	T	7/1/1998	VANADIUM	3.9E+00		2	2
KM-16	T	7/1/1999	VANADIUM	3.7E+00		2	2
KM-16	T	7/1/2000	VANADIUM	3.3E+00		2	2
KM-16	T	7/1/2001	VANADIUM	3.2E+00		2	2
KM-16	T	7/1/2002	VANADIUM	2.8E+00		2	2
KM-16	T	7/1/2003	VANADIUM	2.5E+00		2	2
KM-16	T	7/1/2004	VANADIUM	2.3E+00		2	2
KM-16	T	7/1/2005	VANADIUM	2.3E+00		2	2
KM-16	T	7/1/2006	VANADIUM	2.8E+00		2	2
KM-16	T	7/1/2007	VANADIUM	2.4E+00		2	2
KM-16	T	7/1/2008	VANADIUM	2.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-17
Well Type: S
COC: MOLYBDENUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.22

Confidence in Trend: 94.9%

Ln Slope: -8.4E-05

LR Concentration Trend: PD

Consolidation Data Table:

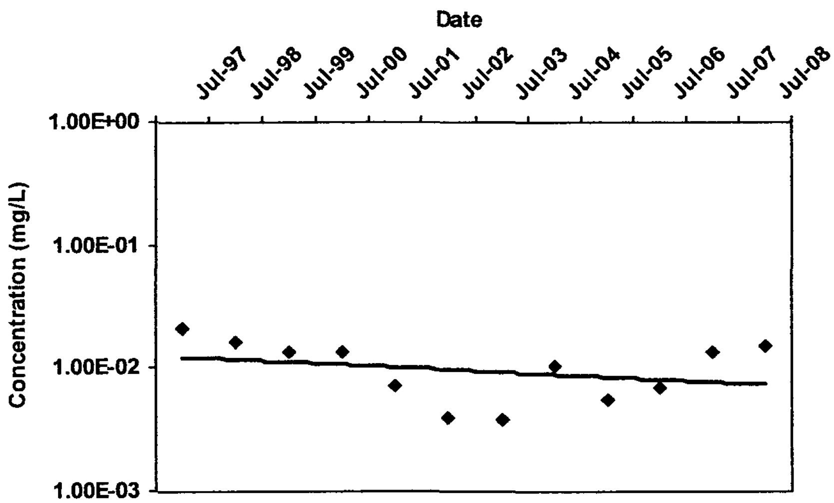
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-17	S	7/1/1997	MOLYBDENUM	4.3E-01		1	1
KM-17	S	7/1/1998	MOLYBDENUM	4.7E-01		2	2
KM-17	S	7/1/1999	MOLYBDENUM	6.0E-01		2	2
KM-17	S	7/1/2000	MOLYBDENUM	6.9E-01		2	2
KM-17	S	7/1/2001	MOLYBDENUM	6.6E-01		2	2
KM-17	S	7/1/2002	MOLYBDENUM	6.4E-01		2	2
KM-17	S	7/1/2003	MOLYBDENUM	6.2E-01		2	2
KM-17	S	7/1/2004	MOLYBDENUM	5.1E-01		2	2
KM-17	S	7/1/2005	MOLYBDENUM	4.8E-01		2	2
KM-17	S	7/1/2006	MOLYBDENUM	4.3E-01		2	2
KM-17	S	7/1/2007	MOLYBDENUM	3.6E-01		2	2
KM-17	S	7/1/2008	MOLYBDENUM	3.8E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-17
Well Type: S
COC: VANADIUM

Time Period: 10/1/1997 **to** 5/10/2008
Consolidation Period: Yearly
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.50

Confidence in Trend: 82.9%

Ln Slope: -1.3E-04

LR Concentration Trend: S

Consolidation Data Table:

Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-17	S	7/1/1997	VANADIUM	2.1E-02		1	1
KM-17	S	7/1/1998	VANADIUM	1.7E-02		1	1
KM-17	S	7/1/1999	VANADIUM	1.3E-02		2	2
KM-17	S	7/1/2000	VANADIUM	1.3E-02		2	2
KM-17	S	7/1/2001	VANADIUM	7.3E-03		2	2
KM-17	S	7/1/2002	VANADIUM	4.0E-03		2	2
KM-17	S	7/1/2003	VANADIUM	3.8E-03		2	2
KM-17	S	7/1/2004	VANADIUM	1.1E-02		2	2
KM-17	S	7/1/2005	VANADIUM	5.6E-03		2	2
KM-17	S	7/1/2006	VANADIUM	7.0E-03		2	2
KM-17	S	7/1/2007	VANADIUM	1.3E-02		2	2
KM-17	S	7/1/2008	VANADIUM	1.5E-02		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

APPENDIX C

MAROS Reports 2004 - 2008

APPENDIX C
TABLE OF CONTENTS

MAROS COC Assessment

Project: Tronox V Mo 13 wells Finch 5 yrs **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Toxicity:

Contaminant of Concern	Representative Concentration (mg/L)	PRG (mg/L)	Percent Above PRG
MOLYBDENUM	6.2E+00	1.8E-01	3347.7%
VANADIUM	3.6E+00	2.6E-01	1301.9%

Note: Top COCs by toxicity were determined by examining a representative concentration for each compound over the entire site. The compound representative concentrations are then compared with the chosen PRG for that compound, with the percentage excedence from the PRG determining the compound's toxicity. All compounds above exceed the PRG.

Prevalence:

Contaminant of Concern	Class	Total Wells	Total Excedences	Percent Excedences	Total detects
MOLYBDENUM	MET	14	13	92.9%	14
VANADIUM	MET	14	11	78.6%	14

Note: Top COCs by prevalence were determined by examining a representative concentration for each well location at the site. The total excedences (values above the chosen PRGs) are compared to the total number of wells to determine the prevalence of the compound.

Mobility:

Contaminant of Concern	Kd
MOLYBDENUM	20
VANADIUM	1000

Note: Top COCs by mobility were determined by examining each detected compound in the dataset and comparing their mobilities (Koc's for organics, assume foc = 0.001, and Kd's for metals).

Contaminants of Concern (COC's)

MOLYBDENUM

VANADIUM

MAROS Mann-Kendall Statistics Summary

Project: Tronox V Mo 13 wells Finch 5 yrs

Location: Soda Springs

User Name: Global Environmental

State: Idaho

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
MOLYBDENUM								
KM-3	S	9	9	0.09	-23	99.1%	No	D
KM-9	S	9	9	0.18	-15	92.5%	No	PD
KM-13	S	9	9	0.25	-30	100.0%	No	D
KM-8	S	9	9	0.25	6	69.4%	No	NT
KM-7	S	9	9	0.16	-24	99.4%	No	D
KM-6	S	9	9	0.19	1	50.0%	No	NT
KM-5	S	9	9	0.21	2	54.0%	No	NT
KM-17	S	9	9	0.16	-23	99.1%	No	D
KM-4	S	9	9	0.20	-18	96.2%	No	D
KM-2	S	9	9	0.18	-20	97.8%	No	D
KM-15	T	9	9	0.17	-19	97.0%	No	D
KM-16	T	9	9	0.18	-8	76.2%	No	S
Finch Spring	T	9	9	0.12	-29	100.0%	No	D
VANADIUM								
KM-13	S	9	9	0.06	-21	98.3%	No	D
KM-17	S	9	9	0.46	10	82.1%	No	NT
KM-3	S	9	9	0.39	-5	65.7%	No	S
KM-9	S	9	9	0.10	-19	97.0%	No	D
KM-4	S	9	9	0.27	19	97.0%	No	I
KM-5	S	9	9	0.16	-7	72.8%	No	S
KM-6	S	9	9	0.23	11	84.6%	No	NT
KM-7	S	9	9	0.08	-18	96.2%	No	D
KM-8	S	9	9	0.25	-11	84.6%	No	S
KM-2	S	9	9	0.10	2	54.0%	No	NT
KM-16	T	9	9	0.10	-2	54.0%	No	S
KM-15	T	9	9	0.07	-5	65.7%	No	S
Finch Spring	T	9	9	0.07	-7	72.8%	No	S

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MARROS Linear Regression Statistics Summary

Project: Tronox V Mo 13 wells Finch 5 yrs

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value

Well	Source/ Tail	Average Conc (mg/L)	Median Conc (mg/L)	Standard Deviation	All Samples "ND" ?	Ln Slope	Coefficient of Variation	Confidence in Trend	Concentration Trend
MOLYBDENUM									
KM-9	S	1.8E-01	1.8E-01	3.3E-02	No	-1.7E-04	0.18	90.6%	PD
KM-5	S	1.9E-01	1.8E-01	4.1E-02	No	1.2E-06	0.21	100.0%	I
KM-13	S	2.8E-01	3.0E-01	6.9E-02	No	-4.6E-04	0.25	99.9%	D
KM-3	S	7.1E+00	6.9E+00	6.4E-01	No	-1.4E-04	0.09	99.4%	D
KM-7	S	4.2E-01	4.3E-01	6.6E-02	No	-2.4E-04	0.16	99.0%	D
KM-4	S	2.6E+00	2.4E+00	5.2E-01	No	-2.6E-04	0.20	98.7%	D
KM-2	S	1.3E+00	1.3E+00	2.3E-01	No	-2.5E-04	0.18	98.3%	D
KM-6	S	1.4E+00	1.4E+00	2.6E-01	No	5.0E-05	0.19	64.8%	NT
KM-17	S	4.4E-01	4.6E-01	7.0E-02	No	-2.8E-04	0.16	99.9%	D
KM-8	S	3.6E+01	3.5E+01	8.8E+00	No	8.1E-05	0.25	66.2%	NT
Finch Spring	T	2.1E-01	2.0E-01	2.6E-02	No	-2.1E-04	0.12	100.0%	D
KM-15	T	4.6E-01	4.5E-01	7.7E-02	No	-1.5E-04	0.17	91.3%	PD
KM-16	T	8.3E-01	8.2E-01	1.5E-01	No	-4.5E-05	0.18	64.0%	S
VANADIUM									
KM-17	S	1.0E-02	1.0E-02	4.7E-03	No	3.8E-04	0.46	84.0%	NT
KM-2	S	4.6E+00	4.7E+00	4.7E-01	No	3.0E-05	0.10	64.9%	NT
KM-3	S	2.8E+00	2.3E+00	1.1E+00	No	-1.9E-04	0.39	76.3%	S
KM-13	S	5.2E-01	5.1E-01	3.1E-02	No	-8.9E-05	0.06	98.7%	D
KM-4	S	5.9E+00	6.0E+00	1.6E+00	No	2.9E-04	0.27	93.4%	PI
KM-6	S	4.2E+00	3.9E+00	9.6E-01	No	1.3E-04	0.23	80.3%	NT
KM-7	S	2.3E+00	2.3E+00	1.9E-01	No	-8.0E-05	0.08	91.9%	PD
KM-8	S	2.0E+01	1.8E+01	5.1E+00	No	-2.8E-04	0.25	95.2%	D
KM-9	S	4.5E-01	4.5E-01	4.6E-02	No	-1.4E-04	0.10	98.7%	D
KM-5	S	1.2E+00	1.1E+00	2.0E-01	No	-5.6E-05	0.16	68.6%	S
KM-16	T	2.4E+00	2.4E+00	2.5E-01	No	-8.8E-07	0.10	100.0%	D
Finch Spring	T	6.0E-02	6.1E-02	4.2E-03	No	-4.5E-05	0.07	80.2%	S
KM-15	T	9.0E-01	8.6E-01	6.0E-02	No	-4.9E-05	0.07	83.5%	S

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); COV = Coefficient of Variation

MAROS Plume Analysis Summary

Project: Tronox V Mo 13 wells Finch 5 yrs

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Time Period: 5/1/2004 **to** 5/30/2008

Consolidation Period: No Time Consolidation

Consolidation Type: Geometric Mean

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Constituent	Well	Source/ Tail	Number of Samples	Number of Detects	Average (mg/L)	Median (mg/L)	All Samples "ND" ?	Mann-Kendall	Linear Regression	Modeling	Empirical
MOLYBDENUM											
	KM-3	S	9	9	7.1E+00	6.9E+00	No	D	D	N/A	N/A
	KM-9	S	9	9	1.8E-01	1.8E-01	No	PD	PD	N/A	N/A
	KM-13	S	9	9	2.8E-01	3.0E-01	No	D	D	N/A	N/A
	KM-8	S	9	9	3.6E+01	3.5E+01	No	NT	NT	N/A	N/A
	KM-7	S	9	9	4.2E-01	4.3E-01	No	D	D	N/A	N/A
	KM-6	S	9	9	1.4E+00	1.4E+00	No	NT	NT	N/A	N/A
	KM-5	S	9	9	1.9E-01	1.8E-01	No	NT	I	N/A	N/A
	KM-17	S	9	9	4.4E-01	4.6E-01	No	D	D	N/A	N/A
	KM-4	S	9	9	2.6E+00	2.4E+00	No	D	D	N/A	N/A
	KM-2	S	9	9	1.3E+00	1.3E+00	No	D	D	N/A	N/A
	KM-15	T	9	9	4.6E-01	4.5E-01	No	D	PD	N/A	N/A
	KM-16	T	9	9	8.3E-01	8.2E-01	No	S	S	N/A	N/A
	Finch Spring	T	9	9	2.1E-01	2.0E-01	No	D	D	N/A	N/A
VANADIUM											
	KM-13	S	9	9	5.2E-01	5.1E-01	No	D	D	N/A	N/A
	KM-17	S	9	9	1.0E-02	1.0E-02	No	NT	NT	N/A	N/A
	KM-3	S	9	9	2.8E+00	2.3E+00	No	S	S	N/A	N/A
	KM-9	S	9	9	4.5E-01	4.5E-01	No	D	D	N/A	N/A
	KM-4	S	9	9	5.9E+00	6.0E+00	No	I	PI	N/A	N/A
	KM-5	S	9	9	1.2E+00	1.1E+00	No	S	S	N/A	N/A
	KM-6	S	9	9	4.2E+00	3.9E+00	No	NT	NT	N/A	N/A

Project: Tronox V Mo 13 wells Finch 5 yrs **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Constituent	Well	Source/ Tail	Number of Samples	Number of Detects	Average (mg/L)	Median (mg/L)	All Samples "ND" ?	Mann-Kendall	Linear Regression	Modeling	Empirical
VANADIUM											
	KM-7	S	9	9	2.3E+00	2.3E+00	No	D	PD	N/A	N/A
	KM-8	S	9	9	2.0E+01	1.8E+01	No	S	D	N/A	N/A
	KM-2	S	9	9	4.6E+00	4.7E+00	No	NT	NT	N/A	N/A
	KM-16	T	9	9	2.4E+00	2.4E+00	No	S	D	N/A	N/A
	KM-15	T	9	9	9.0E-01	8.6E-01	No	S	S	N/A	N/A
	Finch Spring	T	9	9	6.0E-02	6.1E-02	No	S	S	N/A	N/A

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

C-7

MAROS Spatial Moment Analysis Summary

Project: Tronox V Mo 13 wells Finch 5 yrs

Location: Soda Springs

User Name: Global Environmental

State: Idaho

	0th Moment	1st Moment (Center of Mass)			2nd Moment (Spread)		
Effective Date	**Estimated Mass (Kg)**	**Xc (ft)**	**Yc (ft)**	**Source Distance (ft)**	**Sigma XX (sq ft)**	**Sigma YY (sq ft)**	**Number of Wells**
MOLYBDENUM							
5/3/2004	7.5E+03	658,849	370,970	1,495	353,448	944,021	13
10/13/2004	6.5E+03	658,830	370,938	1,533	345,286	963,167	13
5/3/2005	7.0E+03	658,802	370,989	1,508	345,273	918,992	13
10/25/2005	6.5E+03	658,833	370,969	1,506	344,793	934,475	13
5/15/2006	7.0E+03	658,767	370,979	1,537	328,271	911,206	13
10/23/2006	6.1E+03	658,812	370,995	1,497	345,488	913,682	13
5/14/2007	5.8E+03	658,792	371,000	1,505	342,660	907,972	13
10/15/2007	5.9E+03	658,830	371,003	1,479	346,430	914,812	13
5/5/2008	5.8E+03	658,795	371,013	1,493	341,124	911,775	13
VANADIUM							
5/3/2004	7.8E+03	658,759	371,624	1,103	348,179	466,673	13
10/13/2004	6.6E+03	658,693	371,633	1,155	323,330	439,755	13
5/3/2005	6.4E+03	658,755	371,683	1,078	351,051	398,310	13
10/25/2005	6.6E+03	658,717	371,644	1,130	324,212	421,811	13
5/15/2006	8.0E+03	658,783	371,739	1,026	314,225	345,668	13
10/23/2006	7.2E+03	658,745	371,639	1,108	319,837	433,967	13
5/14/2007	7.5E+03	658,778	371,613	1,093	330,251	485,674	13
10/15/2007	7.1E+03	658,754	371,644	1,097	331,495	442,587	13
5/5/2008	7.1E+03	658,802	371,621	1,068	343,745	486,609	13

Project: Tronox V Mo 13 wells Finch 5 yrs

Location: Soda Springs

User Name: Global Environmental

State: Idaho

Moment Type	Constituent	Coefficient of Variation	Mann-Kendall S Statistic	Confidence in Trend	Moment Trend
Zeroth Moment: Mass					
	MOLYBDENUM	0.10	-26	99.7%	D
	VANADIUM	0.08	4	61.9%	NT
1st Moment: Distance to Source					
	MOLYBDENUM	0.01	-14	91.0%	PD
	VANADIUM	0.03	-12	87.0%	S
2nd Moment: Sigma XX					
	MOLYBDENUM	0.02	-12	87.0%	S
	VANADIUM	0.04	2	54.0%	NT
2nd Moment: Sigma YY					
	MOLYBDENUM	0.02	-20	97.8%	D
	VANADIUM	0.10	10	82.1%	NT

Note: The following assumptions were applied for the calculation of the Zeroth Moment:

Porosity: 0.20 **Saturated Thickness:** Uniform: 200 ft

Mann-Kendall Trend test performed on all sample events for each constituent. Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events).

Note: The Sigma XX and Sigma YY components are estimated using the given field coordinate system and then rotated to align with the estimated groundwater flow direction. Moments are not calculated for sample events with less than 6 wells.

MAROS Site Results

Project: Tronox 13 wells Finch 04 to 08

User Name: Global Environmental

Location: Soda Springs

State: Idaho

User Defined Site and Data Assumptions:

Hydrogeology and Plume Information:

Groundwater Seepage Velocity: 5475 ft/yr

Current Plume Length: 6000 ft

Current Plume Width 3500 ft

Number of Tail Wells: 3

Number of Source Wells: 11

Source Information:

Source Treatment: No Current Site Treatment

NAPL is not observed at this site.

Down-gradient Information:

Distance from Edge of Tail to Nearest:

Down-gradient receptor: -700 ft

Down-gradient property: -2000 ft

Distance from Source to Nearest:

Down-gradient receptor: 5300 ft

Down-gradient property: 4000 ft

Data Consolidation Assumptions:

Time Period: 5/1/2004 **to** 5/30/2008

Consolidation Period: No Time Consolidation

Consolidation Type: Geometric Mean

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Plume Information Weighting Assumptions:

Consolidation Step 1. Weight Plume Information by Chemical

Summary Weighting: Weighting Applied to All Chemicals Equally

Consolidation Step 2. Weight Well Information by Chemical

Well Weighting: No Weighting of Wells was Applied.

Chemical Weighting: *No Weighting of Chemicals was Applied.*

Note: These assumptions were made when consolidating the historical montoring data and lumping the Wells and COCs.

1. Compliance Monitoring/Remediation Optimization Results:

Preliminary Monitoring System Optimization Results: Based on site classification, source treatment and Monitoring System Category the following suggestions are made for site Sampling Frequency, Duration of Sampling before reassessment, and Well Density. These criteria take into consideration: Plume Stability, Type of Plume, and Groundwater Velocity.

COC	Tail Stability	Source Stability	Level of Effort	Sampling Duration	Sampling Frequency	Sampling Density
MOLYBDENUM	PD	PD	L	Sample 2 more years	Biannually (6 months)	> 50
VANADIUM	S	S	M	Sample 4 more years	Quarterly	> 50

Note:

Plume Status: (I) Increasing; (PI)Probably Increasing; (S) Stable; (NT) No Trend; (PD) Probably Decreasing; (D) Decreasing

Design Categories: (E) Extensive; (M) Moderate; (L) Limited (N/A) Not Applicable, Insufficient Data Available

Level of Monitoring Effort Indicated by Analysi Moderate

2. Spatial Moment Analysis Results:

Moment Type	Constituent	Coefficient of Variation	Mann-Kendall S Statistic	Confidence in Trend	Moment Trend
Zeroth Moment: Mass					
	MOLYBDENUM	0.10	-26	99.7%	D
	VANADIUM	0.08	4	61.9%	NT
1st Moment: Distance to Source					
	MOLYBDENUM	0.01	-14	91.0%	PD
	VANADIUM	0.03	-12	87.0%	S
2nd Moment: Sigma XX					
	MOLYBDENUM	0.02	-12	87.0%	S
	VANADIUM	0.04	2	54.0%	NT
2nd Moment: Sigma YY					
	MOLYBDENUM	0.02	-20	97.8%	D
	VANADIUM	0.10	10	82.1%	NT

Note: The following assumptions were applied for the calculation of the Zeroth Moment:

Porosity: 0.20 **Saturated Thickness:** Uniform: 200 ft

Mann-Kendall Trend test performed on all sample events for each constituent. Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events).

MAROS Sampling Location Optimization Results

Project: Tronox 13 wells Finch 04 to 08 **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Sampling Events Analyzed: **From** Spring 04 5/3/2004 **to** Spring 08 5/5/2008

Parameters used:

Constituent	Inside SF	Hull SF	Area Ratio	Conc. Ratio
MOLYBDENUM	0.1	0.01	0.95	0.95
VANADIUM	0.1	0.01	0.95	0.95

Well	X (feet)	Y (feet)	Removable?	Average Slope Factor*	Minimum Slope Factor*	Maximum Slope Factor*	Eliminated?
MOLYBDENUM							
Finch Spring	658191.88	367132.03	Yes	0.612	0.552	0.637	No
KM-13	658042.50	372185.75	Yes	0.638	0.518	0.802	No
KM-15	657491.88	370332.03	Yes	0.107	0.044	0.166	No
KM-16	658151.13	371058.75	Yes	0.190	0.094	0.236	No
KM-17	659365.31	371100.34	Yes	0.481	0.433	0.545	No
KM-2	660379.19	371777.03	Yes	0.158	0.122	0.256	No
KM-3	659825.56	371745.66	Yes	0.373	0.321	0.414	No
KM-4	659695.19	372033.81	Yes	0.150	0.073	0.208	No
KM-5	658856.63	372710.72	Yes	0.633	0.384	0.727	No
KM-6	658601.63	371736.94	Yes	0.121	0.024	0.202	No
KM-7	658578.44	372113.19	Yes	0.463	0.357	0.586	No
KM-8	658144.19	371771.97	Yes	0.759	0.699	0.795	No
KM-9	657836.25	371770.47	Yes	0.867	0.787	0.922	No
VANADIUM							
Finch Spring	658191.88	367132.03	Yes	0.269	0.093	0.433	No
KM-13	658042.50	372185.75	Yes	0.266	0.197	0.316	No
KM-15	657491.88	370332.03	Yes	0.211	0.164	0.245	No
KM-16	658151.13	371058.75	Yes	0.112	0.078	0.148	No
KM-17	659365.31	371100.34	Yes	0.873	0.730	1.000	No
KM-2	660379.19	371777.03	Yes	0.204	0.152	0.256	No
KM-3	659825.56	371745.66	Yes	0.086	0.043	0.188	Yes
KM-4	659695.19	372033.81	Yes	0.198	0.116	0.256	No
KM-5	658856.63	372710.72	Yes	0.072	0.041	0.102	No
KM-6	658601.63	371736.94	Yes	0.085	0.032	0.123	Yes
KM-7	658578.44	372113.19	Yes	0.045	0.021	0.072	Yes
KM-8	658144.19	371771.97	Yes	0.333	0.246	0.388	No

Project: Tronox 13 wells Finch 04 to 08 **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Well	X (feet)	Y (feet)	Removable?	Average Slope Factor*	Minimum Slope Factor*	Maximum Slope Factor*	Eliminated?
KM-9	657836.25	371770.47	☑	0.380	0.310	0.444	☐

Note: The Slope Factor indicates the relative importance of a well in the monitoring network at a given sampling event; the larger the SF value of a well, the more important the well is and vice versa; the Average Slope Factor measures the overall well importance in the selected time period; the state coordinates system (i.e., X and Y refer to Easting and Northing respectively) or local coordinates systems may be used; wells that are NOT selected for analysis are not shown above.
* When the report is generated after running the Excel module, SF values will NOT be shown above.

MAROS Sampling Location Optimization

Results by Considering All COCs

Project: Tronox 13 wells Finch 04 to 08 **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Sampling Events Analyzed: **From** Spring 04 5/3/2004 **to** Spring 08 5/5/2008

Well	X (feet)	Y (feet)	Number of COCs	COC-Averaged Slope Factor*	Abandoned?
Finch Spring	658191.88	367132.03	2	0.440	☐
KM-13	658042.50	372185.75	2	0.452	☐
KM-15	657491.88	370332.03	2	0.159	☐
KM-16	658151.13	371058.75	2	0.151	☐
KM-17	659365.31	371100.34	2	0.677	☐
KM-2	660379.19	371777.03	2	0.181	☐
KM-3	659825.56	371745.66	2	0.230	☐
KM-4	659695.19	372033.81	2	0.174	☐
KM-5	658856.63	372710.72	2	0.353	☐
KM-6	658601.63	371736.94	2	0.103	☐
KM-7	658578.44	372113.19	2	0.254	☐
KM-8	658144.19	371771.97	2	0.546	☐
KM-9	657836.25	371770.47	2	0.623	☐

Note: the COC-Averaged Slope Factor is the value calculated by averaging those "Average Slope Factor" obtained earlier across COCs; to be conservative, a location is "abandoned" only when it is eliminated from all COCs; "abandoned" doesn't necessarily mean the abandon of well, it can mean that NO samples need to be collected for any COCs.

* When the report is generated after running the Excel module, SF values will NOT be shown above.

MAROS Sampling Frequency Optimization Results

Project: Tronox 13 wells Finch 04 to 08 **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

The Overall Number of Sampling Events: 9

"Recent Period" defined by events: **From** Spring 04 5/3/2004 **To** Spring 08 5/5/2008

"Rate of Change" parameters used:

Constituent	Cleanup Goal	Low Rate	Medium Rate	High Rate
MOLYBDENUM	0.18	0.09	0.18	0.36
VANADIUM	0.26	0.13	0.26	0.52

Units: Cleanup Goal is in mg/L; all rate parameters are in mg/L/year.

Well	Recommended Sampling Frequency	Frequency Based on Recent Data	Frequency Based on Overall Data
MOLYBDENUM			
Finch Spring	Annual	Annual	Annual
KM-13	Annual	Annual	Annual
KM-15	Annual	Annual	Annual
KM-16	Annual	Annual	Annual
KM-17	Annual	Annual	Annual
KM-2	Annual	Annual	Annual
KM-3	Annual	Annual	Annual
KM-4	Annual	Annual	Annual
KM-5	Annual	Annual	Annual
KM-6	Annual	Annual	Annual
KM-7	Annual	Annual	Annual
KM-8	Quarterly	Quarterly	Quarterly
KM-9	Annual	Annual	Annual
VANADIUM			
Finch Spring	Biennial	Annual	Annual
KM-13	Annual	Annual	Annual
KM-15	Annual	Annual	Annual
KM-16	Annual	Annual	Annual
KM-17	Biennial	Annual	Annual
KM-2	Annual	Annual	Annual
KM-3	Annual	Annual	Annual
KM-4	Quarterly	Quarterly	Quarterly
KM-5	Annual	Annual	Annual

Project: Tronox 13 wells Finch 04 to 08

User Name: Global Environmental

Location: Soda Springs

State: Idaho

Well	Recommended Sampling Frequency	Frequency Based on Recent Data	Frequency Based on Overall Data
KM-6	Annual	Annual	Annual
KM-7	Annual	Annual	Annual
KM-8	Annual	Annual	Annual
KM-9	Annual	Annual	Annual

Note: Sampling frequency is determined considering both recent and overall concentration trends. Sampling Frequency is the final recommendation; Frequency Based on Recent Data is the frequency determined using recent (short) period of monitoring data; Frequency Based on Overall Data is the frequency determined using overall (long) period of monitoring data. If the "recent period" is defined using a different series of sampling events, the results could be different.

MAROS Power Analysis for Individual Well Cleanup Status

Project: Tronox 13 wells Finch 04 to 08 **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

From Period: 5/3/2004 **to** 5/5/2008

Well	Sample Size	Sample Mean	Sample Stdev.	Normal Distribution Assumption Cleanup Status	Lognormal Distribution Assumption Cleanup Status	Alpha Level	Expected Power
MOLYBDENUM			Cleanup Goal (mg/L) = 0.18		Target Level (mg/L) = 0.144		
Finch Spring	9	2.14E-01	2.55E-02	Not Attained	Not Attained	0.05	0.8
KM-13	9	2.82E-01	6.92E-02	Not Attained	Not Attained	0.05	0.8
KM-15	9	4.64E-01	7.70E-02	Not Attained	Not Attained	0.05	0.8
KM-16	9	8.29E-01	1.50E-01	Not Attained	Not Attained	0.05	0.8
KM-17	9	4.40E-01	7.04E-02	Not Attained	Not Attained	0.05	0.8
KM-2	9	1.27E+00	2.29E-01	Cont Sampling	Not Attained	0.05	0.8
KM-3	9	7.10E+00	6.44E-01	Cont Sampling	Not Attained	0.05	0.8
KM-4	9	2.57E+00	5.17E-01	Cont Sampling	Not Attained	0.05	0.8
KM-5	9	1.94E-01	4.13E-02	Not Attained	Not Attained	0.05	0.8
KM-6	9	1.38E+00	2.59E-01	Cont Sampling	Not Attained	0.05	0.8
KM-7	9	4.23E-01	6.58E-02	Not Attained	Not Attained	0.05	0.8
KM-8	9	3.60E+01	8.83E+00	Cont Sampling	Not Attained	0.05	0.8
KM-9	9	1.81E-01	3.33E-02	Not Attained	Not Attained	0.05	0.8
VANADIUM			Cleanup Goal (mg/L) = 0.26		Target Level (mg/L) = 0.208		
Finch Spring	9	6.04E-02	4.22E-03	Attained	Attained	0.05	0.8
KM-13	9	5.16E-01	3.13E-02	Not Attained	Not Attained	0.05	0.8
KM-15	9	8.96E-01	6.00E-02	Not Attained	Not Attained	0.05	0.8
KM-16	9	2.42E+00	2.54E-01	Cont Sampling	Not Attained	0.05	0.8
KM-17	9	1.02E-02	4.74E-03	Attained	Attained	0.05	0.8
KM-2	9	4.57E+00	4.72E-01	Cont Sampling	Not Attained	0.05	0.8
KM-3	9	2.79E+00	1.08E+00	Cont Sampling	Not Attained	0.05	0.8
KM-4	9	5.87E+00	1.59E+00	Cont Sampling	Not Attained	0.05	0.8
KM-5	9	1.23E+00	2.00E-01	Not Attained	Not Attained	0.05	0.8
KM-6	9	4.24E+00	9.61E-01	Cont Sampling	Not Attained	0.05	0.8
KM-7	9	2.30E+00	1.87E-01	Not Attained	Not Attained	0.05	0.8
KM-8	9	2.00E+01	5.07E+00	Cont Sampling	Not Attained	0.05	0.8
KM-9	9	4.51E-01	4.62E-02	Not Attained	Not Attained	0.05	0.8

Note: N/C refers to "not conducted" because of insufficient data (N<4); S/E indicates the sample mean significantly exceeds the cleanup level and thus no analysis is conducted; Sample Size is the number of concentration data in a sampling location that are used in the analysis; The Target Level is the expected mean concentration in wells after cleanup attainment, it is only used in individual well celanup status evaluation. The test for evaluating attainment status is from EPA (1992). Refer to Appendix A.6 of MAROS Manual for details.

Individual Well Cleanup Status - Optional Analysis Results

Project: Tronox 13 wells Finch 04 to 08 **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

From Period: 5/3/2004 **to** 5/5/2008

				Normal Distribution Assumption			Lognormal Distribution Assumption		
Well	**Sample Size**	**Sample Mean**	**Sample Stdev.**	**Significantly < Cleanup Goal?**	**Power**	**Expected Sample Size**	**Significantly < Cleanup Goal?**	**Power**	**Expected Sample Size**
MOLYBDENUM				Cleanup Goal (mg/L) = 0.18	Alpha Level = 0.05		Expected Power = 0.8		
Finch Spring	9	2.14E-01	2.55E-02	NO	S/E	S/E	NO	S/E	S/E
KM-13	9	2.82E-01	6.92E-02	NO	S/E	S/E	NO	S/E	S/E
KM-15	9	4.64E-01	7.70E-02	NO	S/E	S/E	NO	S/E	S/E
KM-16	9	8.29E-01	1.50E-01	NO	S/E	S/E	NO	S/E	S/E
KM-17	9	4.40E-01	7.04E-02	NO	S/E	S/E	NO	S/E	S/E
KM-2	9	1.27E+00	2.29E-01	NO	S/E	S/E	NO	S/E	S/E
KM-3	9	7.10E+00	6.44E-01	NO	S/E	S/E	NO	S/E	S/E
KM-4	9	2.57E+00	5.17E-01	NO	S/E	S/E	NO	S/E	S/E
KM-5	9	1.94E-01	4.13E-02	NO	S/E	S/E	NO	S/E	S/E
KM-6	9	1.38E+00	2.59E-01	NO	S/E	S/E	NO	S/E	S/E
KM-7	9	4.23E-01	6.58E-02	NO	S/E	S/E	NO	S/E	S/E
KM-8	9	3.60E+01	8.83E+00	NO	S/E	S/E	NO	S/E	S/E
KM-9	9	1.81E-01	3.33E-02	NO	S/E	S/E	NO	S/E	S/E
VANADIUM				Cleanup Goal (mg/L) = 0.26	Alpha Level = 0.05		Expected Power = 0.8		
Finch Spring	9	6.04E-02	4.22E-03	YES	1.000	<=3	YES	1.000	<=3
KM-13	9	5.16E-01	3.13E-02	NO	S/E	S/E	NO	S/E	S/E
KM-15	9	8.96E-01	6.00E-02	NO	S/E	S/E	NO	S/E	S/E
KM-16	9	2.42E+00	2.54E-01	NO	S/E	S/E	NO	S/E	S/E
KM-17	9	1.02E-02	4.74E-03	YES	1.000	<=3	YES	1.000	<=3
KM-2	9	4.57E+00	4.72E-01	NO	S/E	S/E	NO	S/E	S/E
KM-3	9	2.79E+00	1.08E+00	NO	S/E	S/E	NO	S/E	S/E
KM-4	9	5.87E+00	1.59E+00	NO	S/E	S/E	NO	S/E	S/E
KM-5	9	1.23E+00	2.00E-01	NO	S/E	S/E	NO	S/E	S/E
KM-6	9	4.24E+00	9.61E-01	NO	S/E	S/E	NO	S/E	S/E
KM-7	9	2.30E+00	1.87E-01	NO	S/E	S/E	NO	S/E	S/E
KM-8	9	2.00E+01	5.07E+00	NO	S/E	S/E	NO	S/E	S/E
KM-9	9	4.51E-01	4.62E-02	NO	S/E	S/E	NO	S/E	S/E

Note: N/C refers to "not conducted" because of insufficient data (N<4); S/E indicates the sample mean significantly exceeds the cleanup level and thus no analysis is conducted; Sample Size is the number of concentration data in a sampling location that are used in the power analysis; Expected Sample Size is the number of concentration data needed to reach the Expected Power under current sample variability; The Target Level is the expected mean concentration in wells after cleanup attainment, it is only used in individual well celanup status evaluation. The Student's t-test on mean difference is used in this analysis. Refer to Appendix A.6 of MAROS Manual for details.

MAROS Risk-Based Power Analysis for Site Cleanup

Project: Tronox 13 wells Finch 04 to 08 **User Name:** Global Environmental

Location: Soda Springs **State:** Idaho

Parameters: **Groundwater Flow Direction:** 240 degrees **Distance to Receptor:** -1300 feet

From Period: Spring 04 **to** Spring 08

5/3/2004 5/5/2008

Selected Plume Centerline Wells:

Well	Distance to Receptor (feet)
KM-15	1121.3
KM-16	2080.3
KM-8	2694.5

The distance is measured in the Groundwater Flow Angle from the well to the compliance boundary.

Sample Event	Sample Size	Sample Mean	Sample Stdev.	Normal Distribution Assumption: Cleanup Status	Power	Expected Sample Size	Lognormal Distribution Assumption: Celanup Status	Power	Expected Sample Size	Alpha Level	Expected Power
MOLYBDENUM				Cleanup Goal = 0.18							
Spring 04	13	5.93E-01	2.12E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 04	13	4.98E-01	1.77E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 05	13	5.86E-01	2.09E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 05	13	3.75E-01	1.33E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 06	13	2.74E-01	9.44E-01	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 06	13	4.17E-01	1.48E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 07	13	4.73E-01	1.69E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Fall 07	13	5.08E-01	1.82E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
Spring 08	13	5.97E-01	2.14E+00	Not Attained	S/E	S/E	Not Attained	S/E	S/E	0.05	0.8
VANADIUM				Cleanup Goal = 0.26							
Spring 04	13	8.87E-02	2.30E-01	Attained	0.832	12	Not Attained	0.155	>100	0.05	0.8
Fall 04	13	9.94E-02	2.98E-01	Attained	0.597	22	Not Attained	0.090	>100	0.05	0.8
Spring 05	13	7.68E-02	1.66E-01	Attained	0.987	6	Not Attained	0.075	>100	0.05	0.8
Fall 05	13	7.91E-02	2.06E-01	Attained	0.924	9	Not Attained	0.125	>100	0.05	0.8
Spring 06	13	7.52E-02	1.31E-01	Attained	1.000	4	Not Attained	0.057	>100	0.05	0.8
Fall 06	13	7.29E-02	1.72E-01	Attained	0.985	7	Not Attained	0.177	>100	0.05	0.8
Spring 07	13	7.55E-02	1.65E-01	Attained	0.989	6	Not Attained	0.252	81	0.05	0.8
Fall 07	13	8.08E-02	2.12E-01	Attained	0.907	10	Not Attained	0.152	>100	0.05	0.8
Spring 08	13	7.75E-02	1.76E-01	Attained	0.976	7	Not Attained	0.237	89	0.05	0.8

Note: #N/C means "not conducted" due to a small sample size (N<4) or that the mean concentration is much greater than the cleanup level; Sample Size is the number of sampling locations used in the power analysis; Expected Sample Size is the number of concentration data needed to reach the Expected Power under current sample variability.

MAROS Zeroth Moment Analysis

Project: Tronox V Mo 13 wells Finch 5 yrs

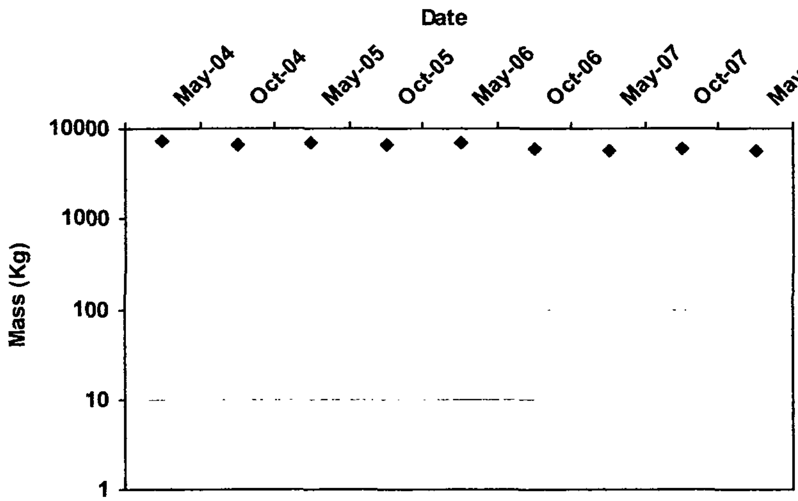
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Change in Dissolved Mass Over Time



Porosity: 0.20

Saturated Thickness:

Uniform: 200 ft

Mann Kendall S Statistic:

-26

Confidence in Trend:

99.7%

Coefficient of Variation:

0.10

Zeroth Moment Trend:

D

Data Table:

Effective Date	Constituent	Estimated Mass (Kg)	Number of Wells
5/3/2004	MOLYBDENUM	7.5E+03	13
10/13/2004	MOLYBDENUM	6.5E+03	13
5/3/2005	MOLYBDENUM	7.0E+03	13
10/25/2005	MOLYBDENUM	6.5E+03	13
5/15/2006	MOLYBDENUM	7.0E+03	13
10/23/2006	MOLYBDENUM	6.1E+03	13
5/14/2007	MOLYBDENUM	5.8E+03	13
10/15/2007	MOLYBDENUM	5.9E+03	13
5/5/2008	MOLYBDENUM	5.8E+03	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect. Moments are not calculated for sample events with less than 6 wells.

MAROS First Moment Analysis

Project: Tronox V Mo 13 wells Finch 5 yrs

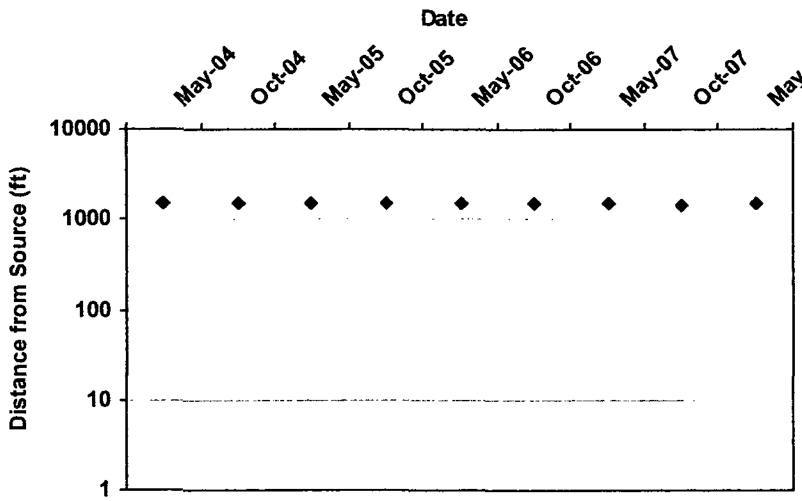
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Distance from Source to Center of Mass



Mann Kendall S Statistic:

-14

Confidence in Trend:

91.0%

Coefficient of Variation:

0.01

First Moment Trend:

PD

Data Table:

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
5/3/2004	MOLYBDENUM	658,849	370,970	1,495	13
10/13/2004	MOLYBDENUM	658,830	370,938	1,533	13
5/3/2005	MOLYBDENUM	658,802	370,989	1,508	13
10/25/2005	MOLYBDENUM	658,833	370,969	1,506	13
5/15/2006	MOLYBDENUM	658,767	370,979	1,537	13
10/23/2006	MOLYBDENUM	658,812	370,995	1,497	13
5/14/2007	MOLYBDENUM	658,792	371,000	1,505	13
10/15/2007	MOLYBDENUM	658,830	371,003	1,479	13
5/5/2008	MOLYBDENUM	658,795	371,013	1,493	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

MAROS First Moment Analysis

Project: Tronox V Mo 13 wells Finch 5 yrs

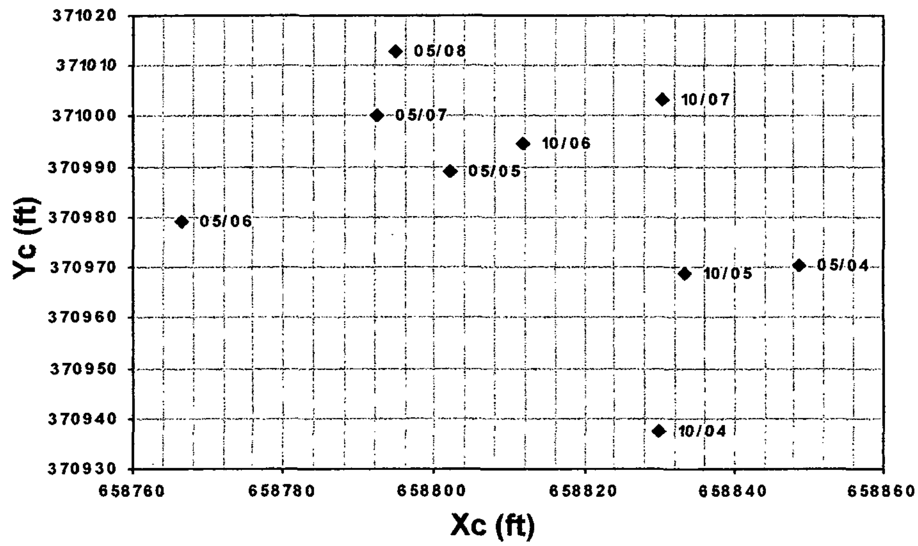
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Change in Location of Center of Mass Over Time



Groundwater Flow Direction:

Source Coordinate:

X: 659,700

Y: 372,200

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
5/3/2004	MOLYBDENUM	658,849	370,970	1,495	13
10/13/2004	MOLYBDENUM	658,830	370,938	1,533	13
5/3/2005	MOLYBDENUM	658,802	370,989	1,508	13
10/25/2005	MOLYBDENUM	658,833	370,969	1,506	13
5/15/2006	MOLYBDENUM	658,767	370,979	1,537	13
10/23/2006	MOLYBDENUM	658,812	370,995	1,497	13
5/14/2007	MOLYBDENUM	658,792	371,000	1,505	13
10/15/2007	MOLYBDENUM	658,830	371,003	1,479	13
5/5/2008	MOLYBDENUM	658,795	371,013	1,493	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

MAROS Second Moment Analysis

Project: Tronox V Mo 13 wells Finch 5 yrs

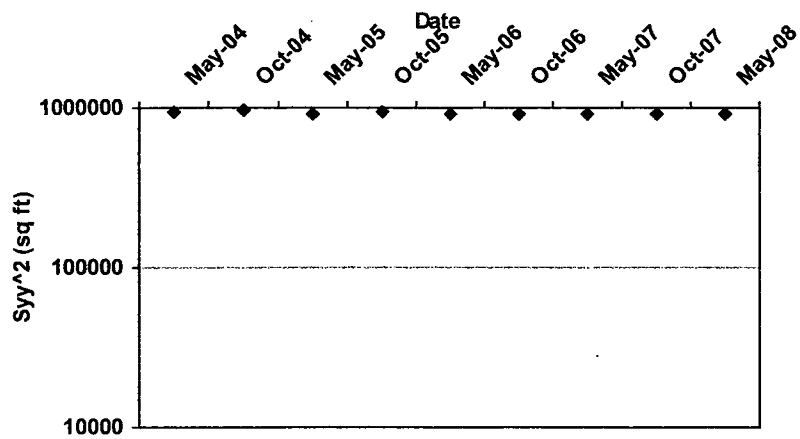
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: MOLYBDENUM

Change in Plume Spread Over Time

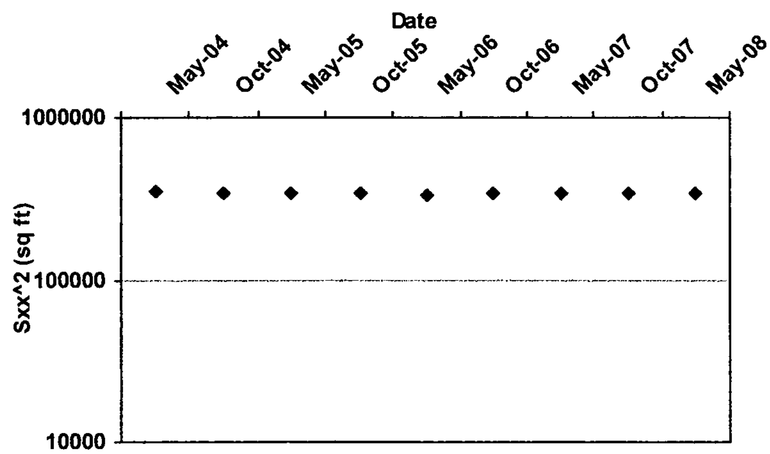


Mann Kendall S Statistic: -20

Confidence in Trend: 97.8%

Coefficient of Variation: 0.02

Second Moment Trend: D



Mann Kendall S Statistic: -12

Confidence in Trend: 87.0%

Coefficient of Variation: 0.02

Second Moment Trend: S

Data Table:

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
5/3/2004	MOLYBDENUM	353,448	944,021	13
10/13/2004	MOLYBDENUM	345,286	963,167	13
5/3/2005	MOLYBDENUM	345,273	918,992	13
10/25/2005	MOLYBDENUM	344,793	934,475	13
5/15/2006	MOLYBDENUM	328,271	911,206	13
10/23/2006	MOLYBDENUM	345,488	913,682	13
5/14/2007	MOLYBDENUM	342,660	907,972	13
10/15/2007	MOLYBDENUM	346,430	914,812	13
5/5/2008	MOLYBDENUM	341,124	911,775	13

MAROS Second Moment Analysis

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events)

The Sigma XX and Sigma YY components are estimated using the given field coordinate system and then rotated to align with the estimated groundwater flow direction. Moments are not calculated for sample events with less than 6 wells.

MAROS Zeroth Moment Analysis

Project: Tronox V Mo 13 wells Finch 5 yrs

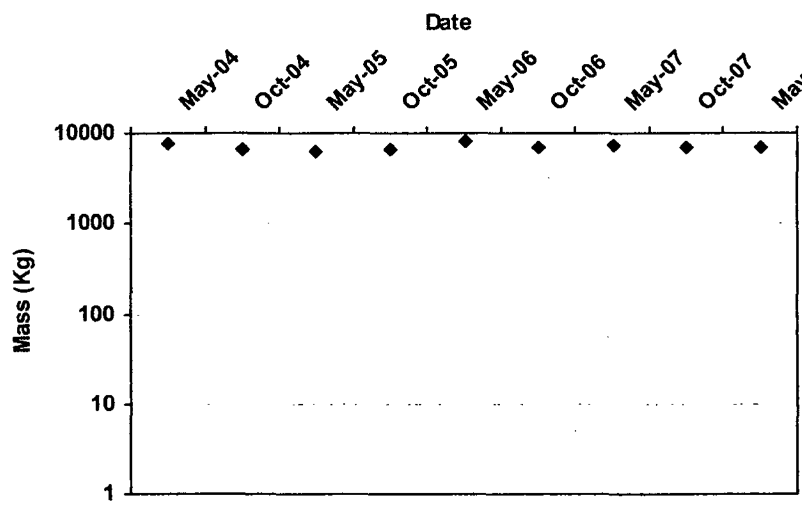
Location: Soda Springs

User Name: Global Environmental

State: Idaho

COC: VANADIUM

Change in Dissolved Mass Over Time



Porosity: 0.20

Saturated Thickness:

Uniform: 200 ft

Mann Kendall S Statistic:

4

Confidence in Trend:

61.9%

Coefficient of Variation:

0.08

Zeroth Moment Trend:

NT

Data Table:

Effective Date	Constituent	Estimated Mass (Kg)	Number of Wells
5/3/2004	VANADIUM	7.8E+03	13
10/13/2004	VANADIUM	6.6E+03	13
5/3/2005	VANADIUM	6.4E+03	13
10/25/2005	VANADIUM	6.6E+03	13
5/15/2006	VANADIUM	8.0E+03	13
10/23/2006	VANADIUM	7.2E+03	13
5/14/2007	VANADIUM	7.5E+03	13
10/15/2007	VANADIUM	7.1E+03	13
5/5/2008	VANADIUM	7.1E+03	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = Non-detect. Moments are not calculated for sample events with less than 6 wells.

MAROS First Moment Analysis

Project: Tronox V Mo 13 wells Finch 5 yrs

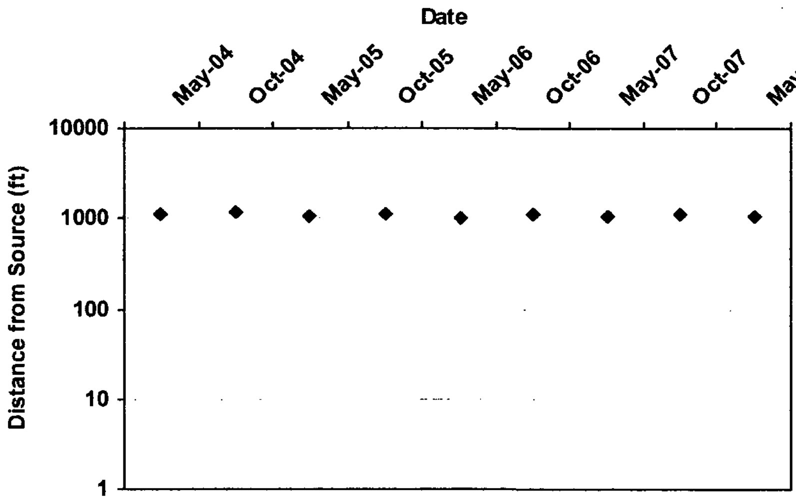
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: VANADIUM

Distance from Source to Center of Mass



Mann Kendall S Statistic: -12

Confidence in Trend: 87.0%

Coefficient of Variation: 0.03

First Moment Trend: S

Data Table:

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
5/3/2004	VANADIUM	658,759	371,624	1,103	13
10/13/2004	VANADIUM	658,693	371,633	1,155	13
5/3/2005	VANADIUM	658,755	371,683	1,078	13
10/25/2005	VANADIUM	658,717	371,644	1,130	13
5/15/2006	VANADIUM	658,783	371,739	1,026	13
10/23/2006	VANADIUM	658,745	371,639	1,108	13
5/14/2007	VANADIUM	658,778	371,613	1,093	13
10/15/2007	VANADIUM	658,754	371,644	1,097	13
5/5/2008	VANADIUM	658,802	371,621	1,068	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

MAROS First Moment Analysis

Project: Tronox V Mo 13 wells Finch 5 yrs

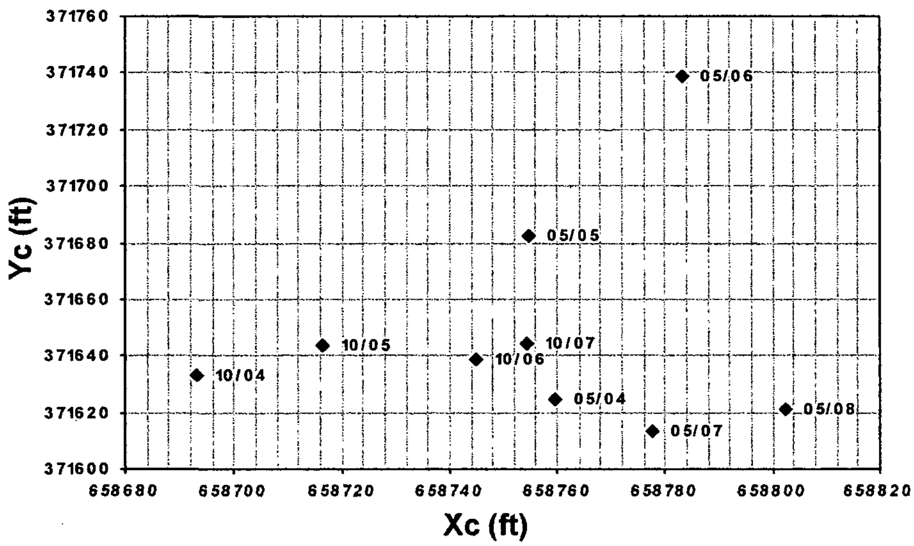
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: VANADIUM

Change in Location of Center of Mass Over Time



Groundwater Flow Direction:

Source Coordinate:

X: 659,700

Y: 372,200

Effective Date	Constituent	Xc (ft)	Yc (ft)	Distance from Source (ft)	Number of Wells
5/3/2004	VANADIUM	658,759	371,624	1,103	13
10/13/2004	VANADIUM	658,693	371,633	1,155	13
5/3/2005	VANADIUM	658,755	371,683	1,078	13
10/25/2005	VANADIUM	658,717	371,644	1,130	13
5/15/2006	VANADIUM	658,783	371,739	1,026	13
10/23/2006	VANADIUM	658,745	371,639	1,108	13
5/14/2007	VANADIUM	658,778	371,613	1,093	13
10/15/2007	VANADIUM	658,754	371,644	1,097	13
5/5/2008	VANADIUM	658,802	371,621	1,068	13

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events). Moments are not calculated for sample events with less than 6 wells.

MAROS Second Moment Analysis

Project: Tronox V Mo 13 wells Finch 5 yrs

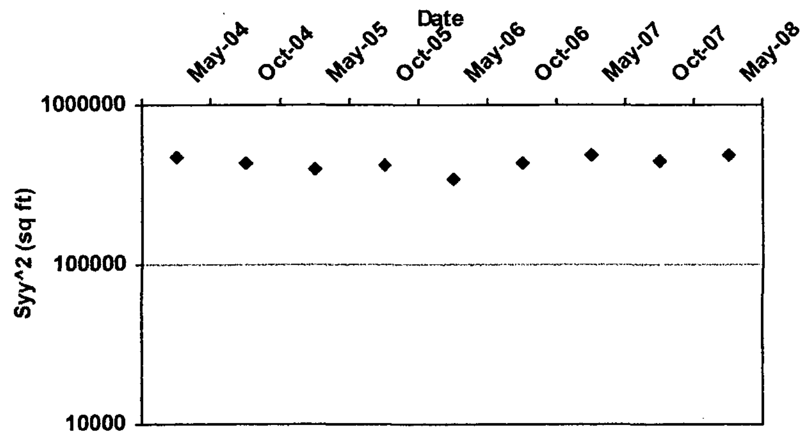
User Name: Global Environmental

Location: Soda Springs

State: Idaho

COC: VANADIUM

Change in Plume Spread Over Time

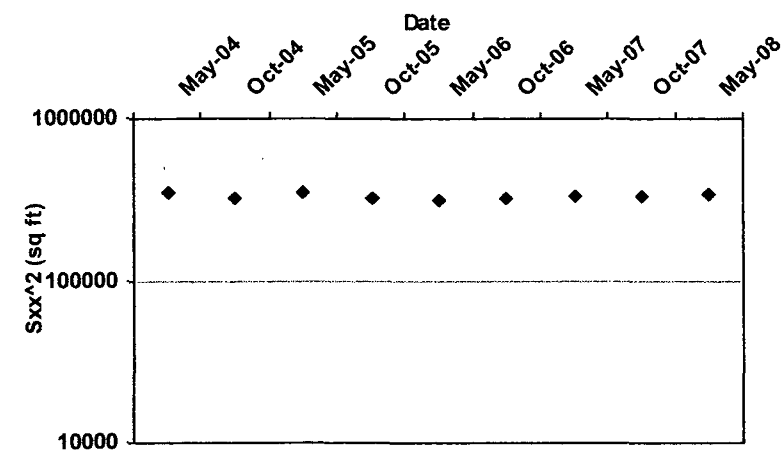


Mann Kendall S Statistic: 10

Confidence in Trend: 82.1%

Coefficient of Variation: 0.10

Second Moment Trend: NT



Mann Kendall S Statistic: 2

Confidence in Trend: 54.0%

Coefficient of Variation: 0.04

Second Moment Trend: NT

Data Table:

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
5/3/2004	VANADIUM	348,179	466,673	13
10/13/2004	VANADIUM	323,330	439,755	13
5/3/2005	VANADIUM	351,051	398,310	13
10/25/2005	VANADIUM	324,212	421,811	13
5/15/2006	VANADIUM	314,225	345,668	13
10/23/2006	VANADIUM	319,837	433,967	13
5/14/2007	VANADIUM	330,251	485,674	13
10/15/2007	VANADIUM	331,495	442,587	13
5/5/2008	VANADIUM	343,745	486,609	13

MAROS Second Moment Analysis

Effective Date	Constituent	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells

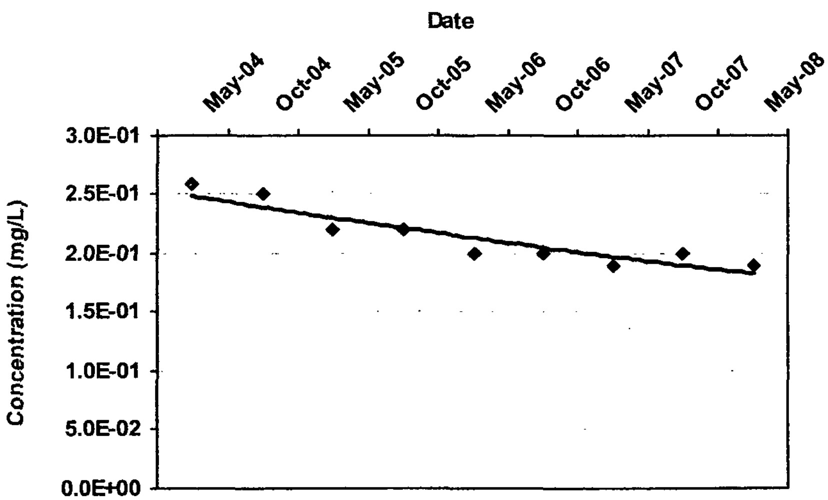
Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events)

The Sigma XX and Sigma YY components are estimated using the given field coordinate system and then rotated to align with the estimated groundwater flow direction. Moments are not calculated for sample events with less than 6 wells.

MAROS Linear Regression Statistics

Well: Finch Spring
Well Type: T
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.12

Confidence in Trend: 100.0%

Ln Slope: -2.1E-04

LR Concentration Trend: D

Consolidation Data Table:

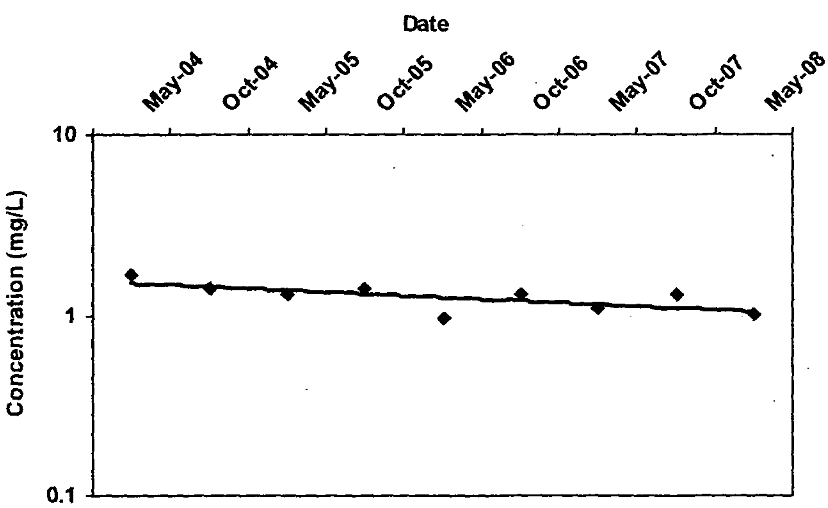
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
Finch Spring	T	5/3/2004	MOLYBDENUM	2.6E-01		1	1
Finch Spring	T	10/13/2004	MOLYBDENUM	2.5E-01		1	1
Finch Spring	T	5/3/2005	MOLYBDENUM	2.2E-01		1	1
Finch Spring	T	10/25/2005	MOLYBDENUM	2.2E-01		1	1
Finch Spring	T	5/15/2006	MOLYBDENUM	2.0E-01		1	1
Finch Spring	T	10/23/2006	MOLYBDENUM	2.0E-01		1	1
Finch Spring	T	5/14/2007	MOLYBDENUM	1.9E-01		1	1
Finch Spring	T	10/15/2007	MOLYBDENUM	2.0E-01		1	1
Finch Spring	T	5/5/2008	MOLYBDENUM	1.9E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-2
Well Type: S
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.18

Confidence in Trend: 98.3%

Ln Slope: -2.5E-04

LR Concentration Trend: D

Consolidation Data Table:

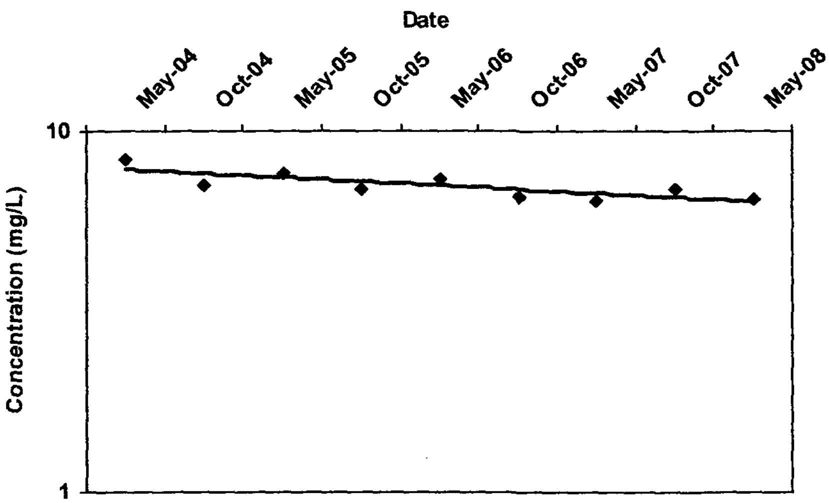
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-2	S	5/3/2004	MOLYBDENUM	1.7E+00		1	1
KM-2	S	10/17/2004	MOLYBDENUM	1.4E+00		1	1
KM-2	S	5/3/2005	MOLYBDENUM	1.3E+00		1	1
KM-2	S	10/25/2005	MOLYBDENUM	1.4E+00		1	1
KM-2	S	5/16/2006	MOLYBDENUM	9.6E-01		1	1
KM-2	S	10/23/2006	MOLYBDENUM	1.3E+00		1	1
KM-2	S	5/14/2007	MOLYBDENUM	1.1E+00		1	1
KM-2	S	10/15/2007	MOLYBDENUM	1.3E+00		1	1
KM-2	S	5/5/2008	MOLYBDENUM	1.0E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-3
Well Type: S
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.09

Confidence in Trend: 99.4%

Ln Slope: -1.4E-04

LR Concentration Trend: D

Consolidation Data Table:

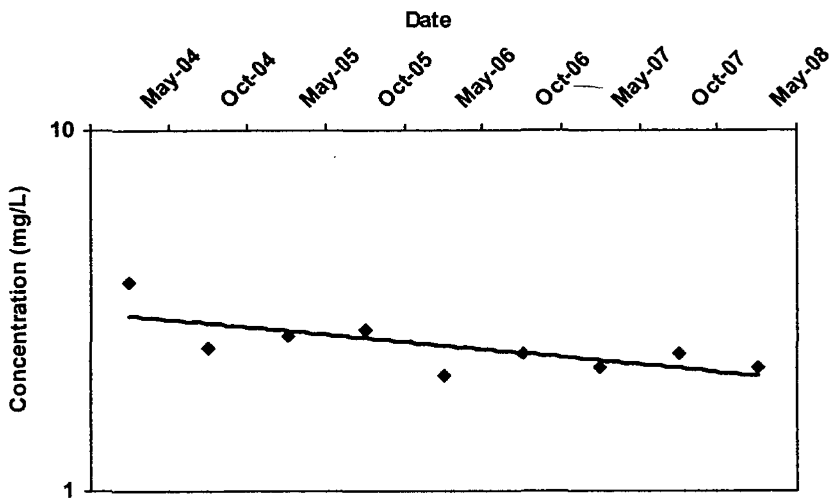
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-3	S	5/3/2004	MOLYBDENUM	8.4E+00		1	1
KM-3	S	10/17/2004	MOLYBDENUM	7.1E+00		1	1
KM-3	S	5/3/2005	MOLYBDENUM	7.7E+00		1	1
KM-3	S	10/25/2005	MOLYBDENUM	6.9E+00		1	1
KM-3	S	5/16/2006	MOLYBDENUM	7.4E+00		1	1
KM-3	S	10/23/2006	MOLYBDENUM	6.6E+00		1	1
KM-3	S	5/14/2007	MOLYBDENUM	6.4E+00		1	1
KM-3	S	10/15/2007	MOLYBDENUM	6.9E+00		1	1
KM-3	S	5/5/2008	MOLYBDENUM	6.5E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-4
Well Type: S
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.20

Confidence in Trend: 98.7%

Ln Slope: -2.6E-04

LR Concentration Trend: D

Consolidation Data Table:

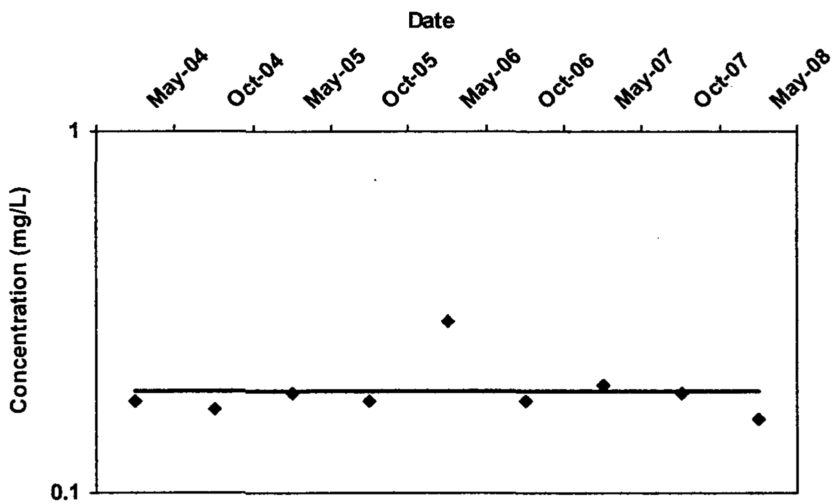
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-4	S	5/3/2004	MOLYBDENUM	3.8E+00		1	1
KM-4	S	10/17/2004	MOLYBDENUM	2.5E+00		1	1
KM-4	S	5/3/2005	MOLYBDENUM	2.7E+00		1	1
KM-4	S	10/25/2005	MOLYBDENUM	2.8E+00		1	1
KM-4	S	5/16/2006	MOLYBDENUM	2.1E+00		1	1
KM-4	S	10/23/2006	MOLYBDENUM	2.4E+00		1	1
KM-4	S	5/14/2007	MOLYBDENUM	2.2E+00		1	1
KM-4	S	10/15/2007	MOLYBDENUM	2.4E+00		1	1
KM-4	S	5/5/2008	MOLYBDENUM	2.2E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-5
Well Type: S
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.21

Confidence in Trend: 100.0%

Ln Slope: 1.2E-06

LR Concentration Trend: I

Consolidation Data Table:

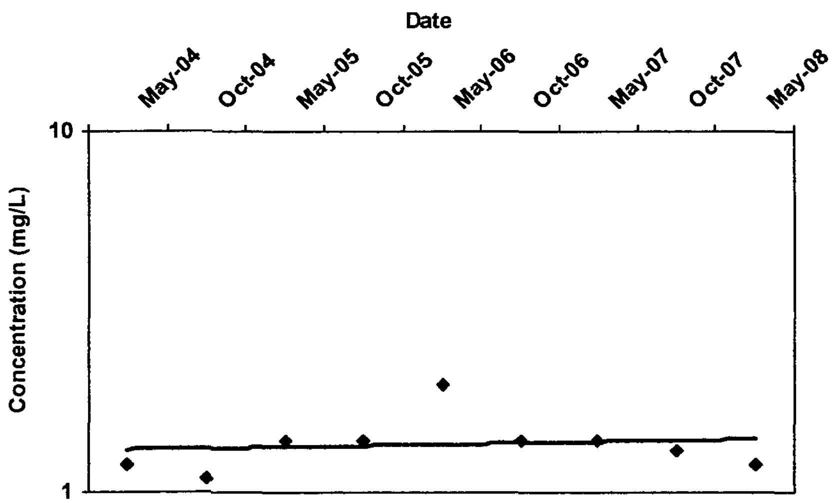
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-5	S	5/3/2004	MOLYBDENUM	1.8E-01		1	1
KM-5	S	10/17/2004	MOLYBDENUM	1.7E-01		1	1
KM-5	S	5/3/2005	MOLYBDENUM	1.9E-01		1	1
KM-5	S	10/25/2005	MOLYBDENUM	1.8E-01		1	1
KM-5	S	5/16/2006	MOLYBDENUM	3.0E-01		1	1
KM-5	S	10/23/2006	MOLYBDENUM	1.8E-01		1	1
KM-5	S	5/14/2007	MOLYBDENUM	2.0E-01		1	1
KM-5	S	10/15/2007	MOLYBDENUM	1.9E-01		1	1
KM-5	S	5/5/2008	MOLYBDENUM	1.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-6
Well Type: S
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.19

Confidence in Trend: 64.7%

Ln Slope: 5.0E-05

LR Concentration Trend: NT

Consolidation Data Table:

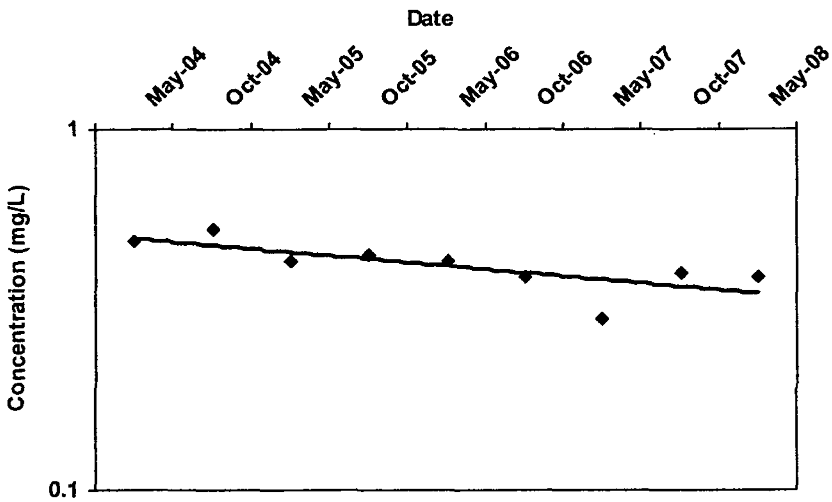
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-6	S	5/3/2004	MOLYBDENUM	1.2E+00		1	1
KM-6	S	10/17/2004	MOLYBDENUM	1.1E+00		1	1
KM-6	S	5/3/2005	MOLYBDENUM	1.4E+00		1	1
KM-6	S	10/25/2005	MOLYBDENUM	1.4E+00		1	1
KM-6	S	5/16/2006	MOLYBDENUM	2.0E+00		1	1
KM-6	S	10/23/2006	MOLYBDENUM	1.4E+00		1	1
KM-6	S	5/14/2007	MOLYBDENUM	1.4E+00		1	1
KM-6	S	10/15/2007	MOLYBDENUM	1.3E+00		1	1
KM-6	S	5/5/2008	MOLYBDENUM	1.2E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - *Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect*

MAROS Linear Regression Statistics

Well: KM-7
Well Type: S
COC: MOLYBDENUM

Time Period: 5/1/2004 ***to*** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.16

Confidence in Trend: 98.9%

Ln Slope: -2.4E-04

LR Concentration Trend: D

Consolidation Data Table:

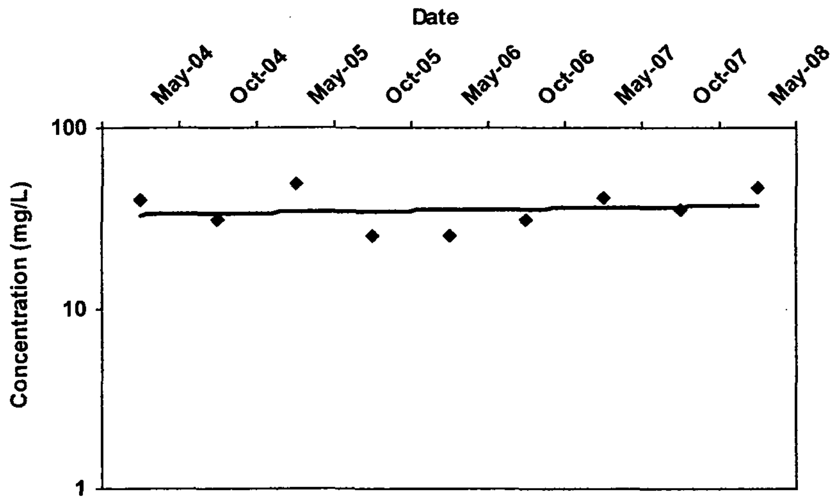
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-7	S	5/3/2004	MOLYBDENUM	4.9E-01		1	1
KM-7	S	10/17/2004	MOLYBDENUM	5.3E-01		1	1
KM-7	S	5/3/2005	MOLYBDENUM	4.3E-01		1	1
KM-7	S	10/25/2005	MOLYBDENUM	4.5E-01		1	1
KM-7	S	5/16/2006	MOLYBDENUM	4.3E-01		1	1
KM-7	S	10/23/2006	MOLYBDENUM	3.9E-01		1	1
KM-7	S	5/14/2007	MOLYBDENUM	3.0E-01		1	1
KM-7	S	10/15/2007	MOLYBDENUM	4.0E-01		1	1
KM-7	S	5/5/2008	MOLYBDENUM	3.9E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-8
Well Type: S
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.25

Confidence in Trend: 66.1%

Ln Slope: 8.1E-05

LR Concentration Trend: NT

Consolidation Data Table:

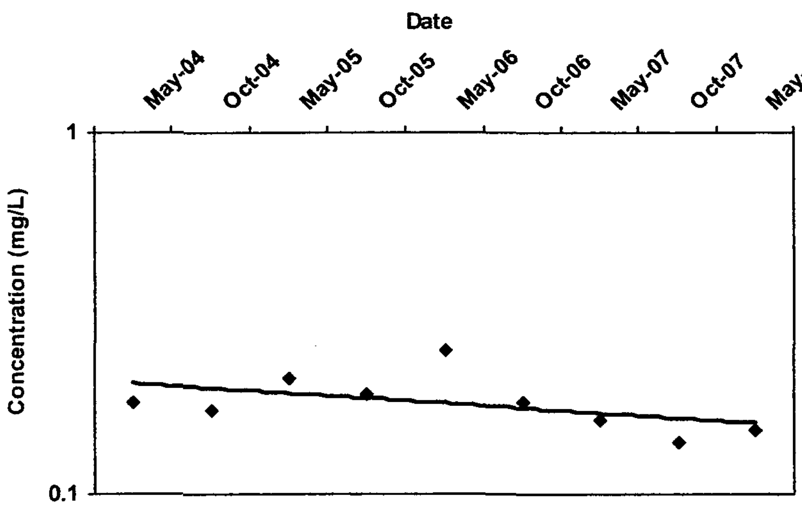
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-8	S	5/3/2004	MOLYBDENUM	4.0E+01		1	1
KM-8	S	10/17/2004	MOLYBDENUM	3.1E+01		1	1
KM-8	S	5/3/2005	MOLYBDENUM	4.9E+01		1	1
KM-8	S	10/25/2005	MOLYBDENUM	2.5E+01		1	1
KM-8	S	5/16/2006	MOLYBDENUM	2.5E+01		1	1
KM-8	S	10/23/2006	MOLYBDENUM	3.1E+01		1	1
KM-8	S	5/14/2007	MOLYBDENUM	4.1E+01		1	1
KM-8	S	10/15/2007	MOLYBDENUM	3.5E+01		1	1
KM-8	S	5/5/2008	MOLYBDENUM	4.7E+01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-9
Well Type: S
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.18

Confidence in Trend: 90.7%

Ln Slope: -1.7E-04

LR Concentration Trend: PD

Consolidation Data Table:

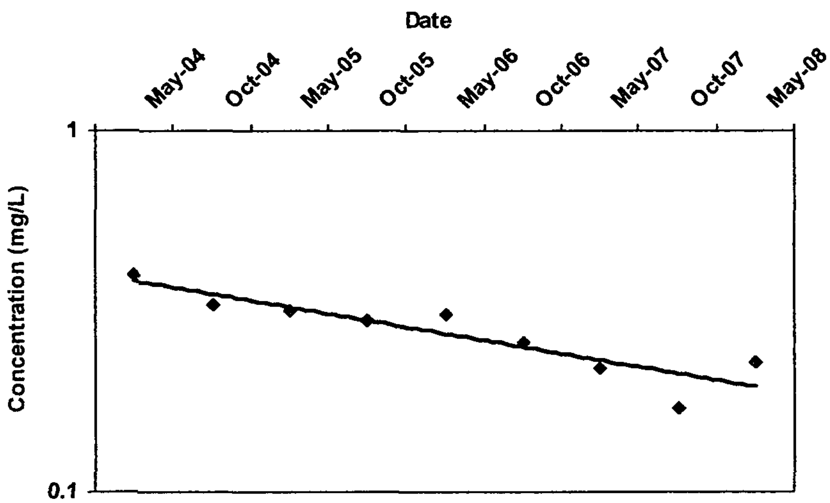
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-9	S	5/3/2004	MOLYBDENUM	1.8E-01		1	1
KM-9	S	10/17/2004	MOLYBDENUM	1.7E-01		1	1
KM-9	S	5/3/2005	MOLYBDENUM	2.1E-01		1	1
KM-9	S	10/25/2005	MOLYBDENUM	1.9E-01		1	1
KM-9	S	5/16/2006	MOLYBDENUM	2.5E-01		1	1
KM-9	S	10/23/2006	MOLYBDENUM	1.8E-01		1	1
KM-9	S	5/14/2007	MOLYBDENUM	1.6E-01		1	1
KM-9	S	10/15/2007	MOLYBDENUM	1.4E-01		1	1
KM-9	S	5/5/2008	MOLYBDENUM	1.5E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-13
Well Type: S
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.25

Confidence in Trend: 99.9%

Ln Slope: -4.6E-04

LR Concentration Trend: D

Consolidation Data Table:

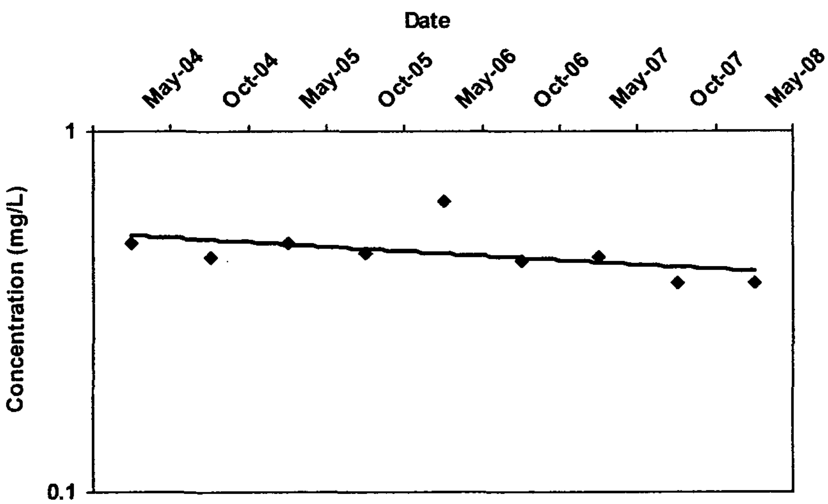
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-13	S	5/3/2004	MOLYBDENUM	4.0E-01		1	1
KM-13	S	10/17/2004	MOLYBDENUM	3.3E-01		1	1
KM-13	S	5/3/2005	MOLYBDENUM	3.2E-01		1	1
KM-13	S	10/25/2005	MOLYBDENUM	3.0E-01		1	1
KM-13	S	5/16/2006	MOLYBDENUM	3.1E-01		1	1
KM-13	S	10/23/2006	MOLYBDENUM	2.6E-01		1	1
KM-13	S	5/14/2007	MOLYBDENUM	2.2E-01		1	1
KM-13	S	10/15/2007	MOLYBDENUM	1.7E-01		1	1
KM-13	S	5/5/2008	MOLYBDENUM	2.3E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-15
Well Type: T
COC: MOLYBDENUM

Time Period: 5/1/2004 ***to*** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.17

Confidence in Trend: 91.4%

Ln Slope: -1.5E-04

LR Concentration Trend: PD

Consolidation Data Table:

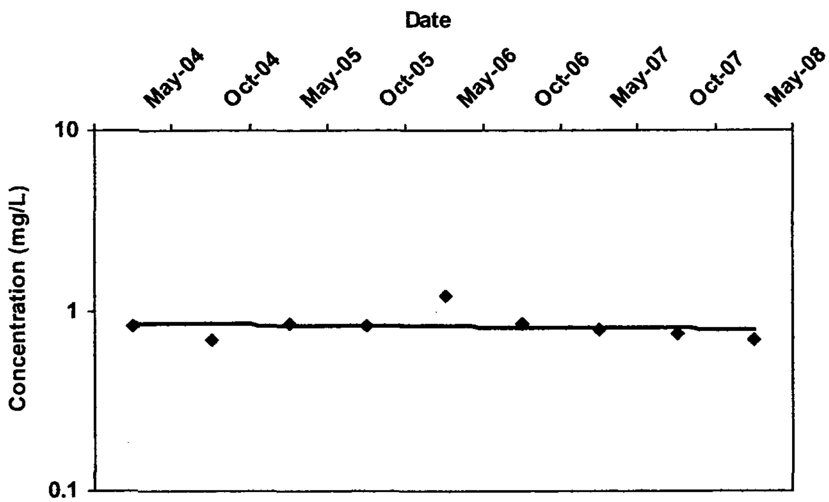
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-15	T	5/3/2004	MOLYBDENUM	4.9E-01		1	1
KM-15	T	10/17/2004	MOLYBDENUM	4.5E-01		1	1
KM-15	T	5/3/2005	MOLYBDENUM	4.9E-01		1	1
KM-15	T	10/25/2005	MOLYBDENUM	4.6E-01		1	1
KM-15	T	5/16/2006	MOLYBDENUM	6.4E-01		1	1
KM-15	T	10/23/2006	MOLYBDENUM	4.4E-01		1	1
KM-15	T	5/14/2007	MOLYBDENUM	4.5E-01		1	1
KM-15	T	10/15/2007	MOLYBDENUM	3.8E-01		1	1
KM-15	T	5/5/2008	MOLYBDENUM	3.8E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-16
Well Type: T
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.18

Confidence in Trend: 64.1%

Ln Slope: -4.5E-05

LR Concentration Trend: S

Consolidation Data Table:

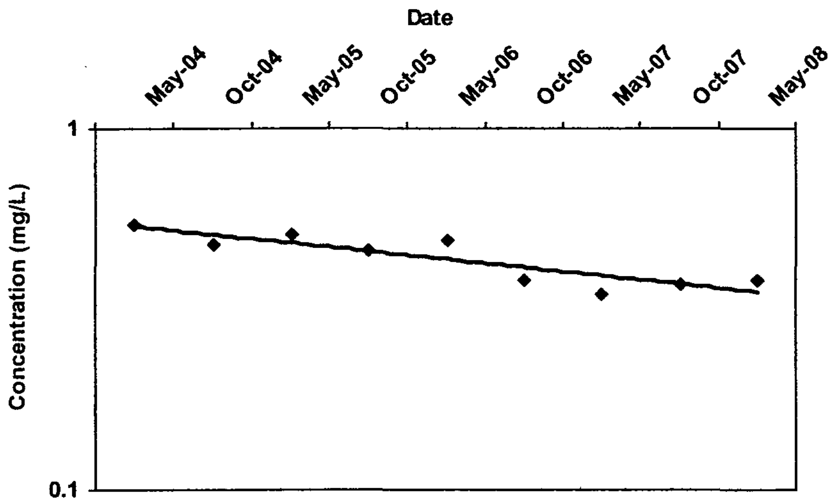
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-16	T	5/3/2004	MOLYBDENUM	8.2E-01		1	1
KM-16	T	10/17/2004	MOLYBDENUM	7.0E-01		1	1
KM-16	T	5/3/2005	MOLYBDENUM	8.4E-01		1	1
KM-16	T	10/25/2005	MOLYBDENUM	8.2E-01		1	1
KM-16	T	5/16/2006	MOLYBDENUM	1.2E+00		1	1
KM-16	T	10/23/2006	MOLYBDENUM	8.5E-01		1	1
KM-16	T	5/14/2007	MOLYBDENUM	7.8E-01		1	1
KM-16	T	10/15/2007	MOLYBDENUM	7.5E-01		1	1
KM-16	T	5/5/2008	MOLYBDENUM	7.0E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-17
Well Type: T
COC: MOLYBDENUM

Time Period: 5/1/2004 **to** 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.16

Confidence in Trend: 99.9%

Ln Slope: -2.8E-04

LR Concentration Trend: D

Consolidation Data Table:

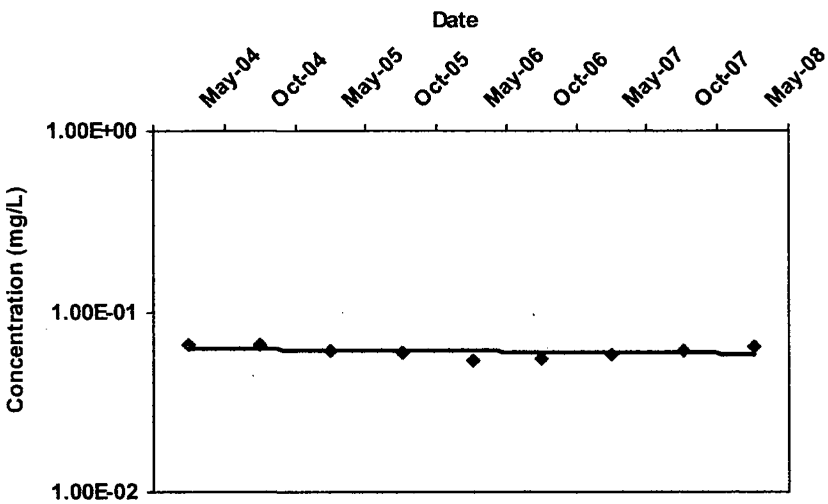
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-17	T	5/3/2004	MOLYBDENUM	5.4E-01		1	1
KM-17	T	10/17/2004	MOLYBDENUM	4.8E-01		1	1
KM-17	T	5/3/2005	MOLYBDENUM	5.1E-01		1	1
KM-17	T	10/25/2005	MOLYBDENUM	4.6E-01		1	1
KM-17	T	5/16/2006	MOLYBDENUM	4.9E-01		1	1
KM-17	T	10/23/2006	MOLYBDENUM	3.8E-01		1	1
KM-17	T	5/14/2007	MOLYBDENUM	3.5E-01		1	1
KM-17	T	10/15/2007	MOLYBDENUM	3.7E-01		1	1
KM-17	T	5/5/2008	MOLYBDENUM	3.8E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: Finch Spring
Well Type: T
COC: VANADIUM

Time Period: 5/1/2004 to 5/30/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.07

Confidence in Trend: 80.2%

Ln Slope: -4.5E-05

LR Concentration Trend: S

Consolidation Data Table:

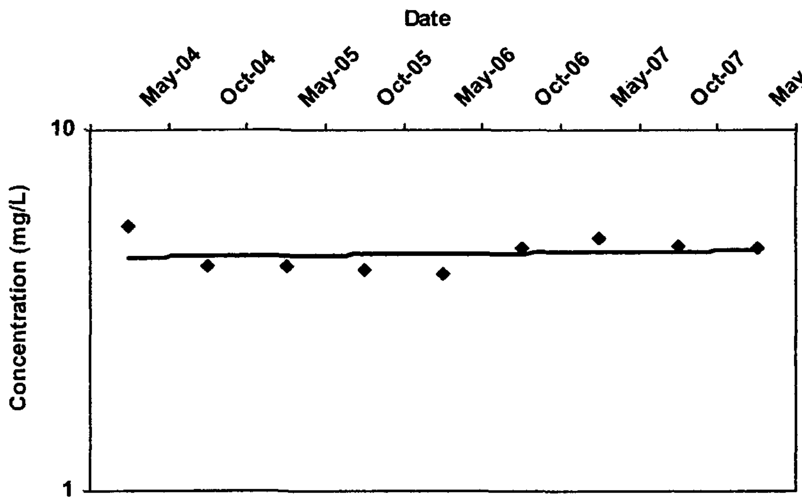
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
Finch Spring	T	5/3/2004	VANADIUM	6.5E-02		1	1
Finch Spring	T	10/13/2004	VANADIUM	6.6E-02		1	1
Finch Spring	T	5/3/2005	VANADIUM	6.1E-02		1	1
Finch Spring	T	10/25/2005	VANADIUM	6.0E-02		1	1
Finch Spring	T	5/15/2006	VANADIUM	5.4E-02		1	1
Finch Spring	T	10/23/2006	VANADIUM	5.5E-02		1	1
Finch Spring	T	5/14/2007	VANADIUM	5.8E-02		1	1
Finch Spring	T	10/15/2007	VANADIUM	6.1E-02		1	1
Finch Spring	T	5/5/2008	VANADIUM	6.4E-02		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-2
Well Type: S
COC: VANADIUM

Time Period: 5/1/2004 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.10

Confidence in Trend: 64.9%

Ln Slope: 3.0E-05

LR Concentration Trend: NT

Consolidation Data Table:

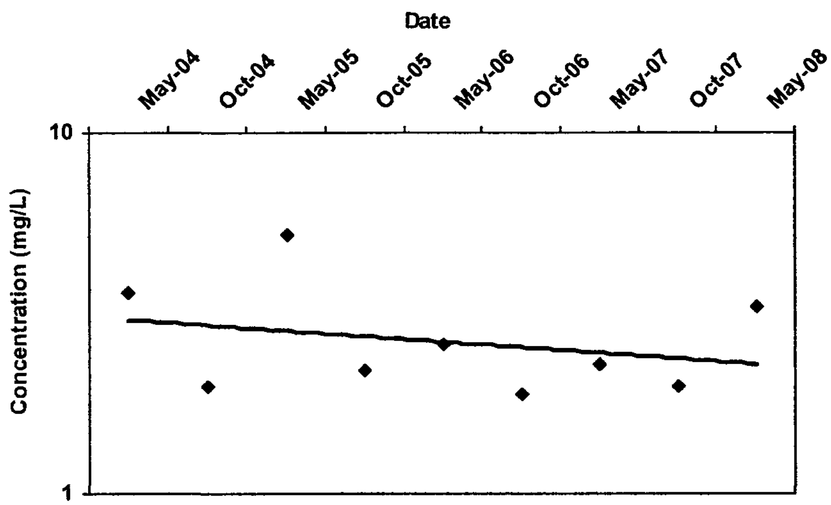
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-2	S	5/3/2004	VANADIUM	5.4E+00		1	1
KM-2	S	10/13/2004	VANADIUM	4.2E+00		1	1
KM-2	S	5/3/2005	VANADIUM	4.2E+00		1	1
KM-2	S	10/25/2005	VANADIUM	4.1E+00		1	1
KM-2	S	5/15/2006	VANADIUM	4.0E+00		1	1
KM-2	S	10/23/2006	VANADIUM	4.7E+00		1	1
KM-2	S	5/14/2007	VANADIUM	5.0E+00		1	1
KM-2	S	10/15/2007	VANADIUM	4.8E+00		1	1
KM-2	S	5/5/2008	VANADIUM	4.7E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-3
Well Type: S
COC: VANADIUM

Time Period: 5/1/2004 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.39

Confidence in Trend: 76.3%

Ln Slope: -1.9E-04

LR Concentration Trend: S

Consolidation Data Table:

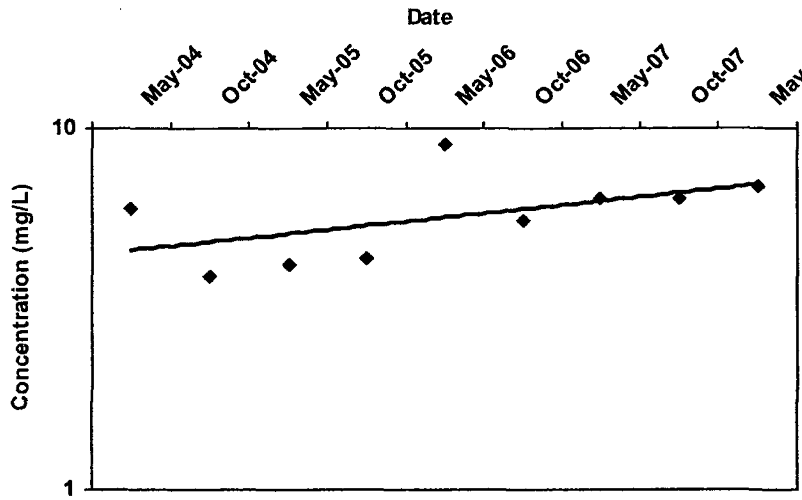
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-3	S	5/3/2004	VANADIUM	3.6E+00		1	1
KM-3	S	10/13/2004	VANADIUM	2.0E+00		1	1
KM-3	S	5/3/2005	VANADIUM	5.2E+00		1	1
KM-3	S	10/25/2005	VANADIUM	2.2E+00		1	1
KM-3	S	5/15/2006	VANADIUM	2.6E+00		1	1
KM-3	S	10/23/2006	VANADIUM	1.9E+00		1	1
KM-3	S	5/14/2007	VANADIUM	2.3E+00		1	1
KM-3	S	10/15/2007	VANADIUM	2.0E+00		1	1
KM-3	S	5/5/2008	VANADIUM	3.3E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-4
Well Type: S
COC: VANADIUM

Time Period: 5/1/2004 to 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.27

Confidence in Trend: 93.4%

Ln Slope: 2.9E-04

LR Concentration Trend: PI

Consolidation Data Table:

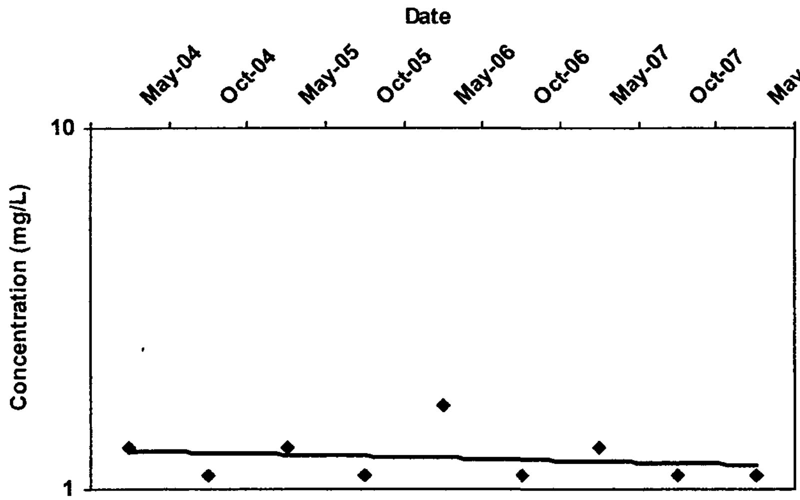
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-4	S	5/3/2004	VANADIUM	6.0E+00		1	1
KM-4	S	10/13/2004	VANADIUM	3.9E+00		1	1
KM-4	S	5/3/2005	VANADIUM	4.2E+00		1	1
KM-4	S	10/25/2005	VANADIUM	4.4E+00		1	1
KM-4	S	5/15/2006	VANADIUM	9.0E+00		1	1
KM-4	S	10/23/2006	VANADIUM	5.6E+00		1	1
KM-4	S	5/14/2007	VANADIUM	6.4E+00		1	1
KM-4	S	10/15/2007	VANADIUM	6.4E+00		1	1
KM-4	S	5/5/2008	VANADIUM	6.9E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-5
Well Type: S
COC: VANADIUM

Time Period: 5/1/2004 to 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.16

Confidence in Trend: 68.6%

Ln Slope: -5.6E-05

LR Concentration Trend: S

Consolidation Data Table:

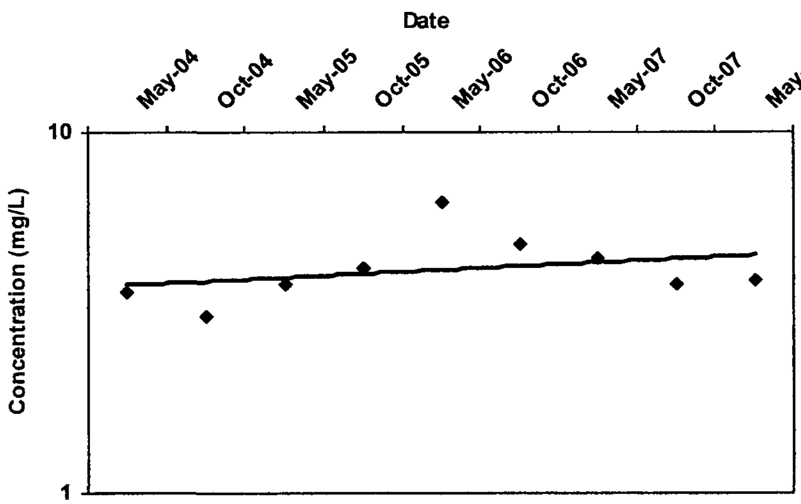
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-5	S	5/3/2004	VANADIUM	1.3E+00		1	1
KM-5	S	10/13/2004	VANADIUM	1.1E+00		1	1
KM-5	S	5/3/2005	VANADIUM	1.3E+00		1	1
KM-5	S	10/25/2005	VANADIUM	1.1E+00		1	1
KM-5	S	5/15/2006	VANADIUM	1.7E+00		1	1
KM-5	S	10/23/2006	VANADIUM	1.1E+00		1	1
KM-5	S	5/14/2007	VANADIUM	1.3E+00		1	1
KM-5	S	10/15/2007	VANADIUM	1.1E+00		1	1
KM-5	S	5/5/2008	VANADIUM	1.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-6
Well Type: S
COC: VANADIUM

Time Period: 5/1/2004 to 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.23

Confidence in Trend: 80.3%

Ln Slope: 1.3E-04

LR Concentration Trend: NT

Consolidation Data Table:

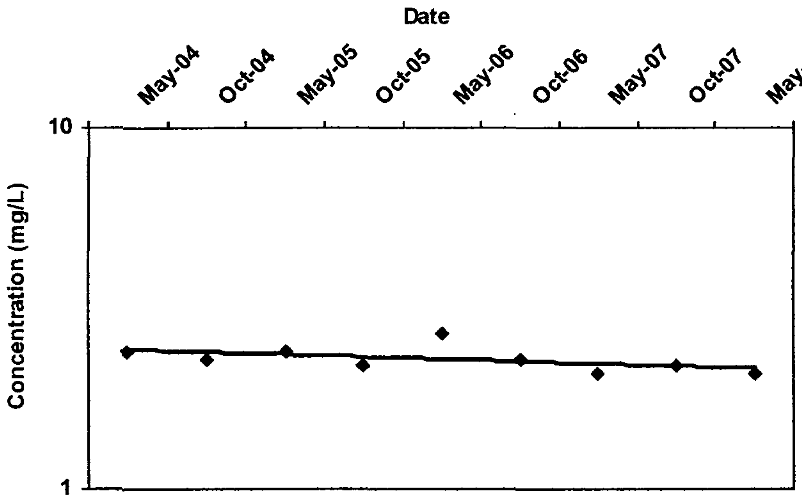
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-6	S	5/3/2004	VANADIUM	3.6E+00		1	1
KM-6	S	10/13/2004	VANADIUM	3.1E+00		1	1
KM-6	S	5/3/2005	VANADIUM	3.8E+00		1	1
KM-6	S	10/25/2005	VANADIUM	4.2E+00		1	1
KM-6	S	5/15/2006	VANADIUM	6.4E+00		1	1
KM-6	S	10/23/2006	VANADIUM	4.9E+00		1	1
KM-6	S	5/14/2007	VANADIUM	4.5E+00		1	1
KM-6	S	10/15/2007	VANADIUM	3.8E+00		1	1
KM-6	S	5/5/2008	VANADIUM	3.9E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-7
Well Type: S
COC: VANADIUM

Time Period: 5/1/2004 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.08

Confidence in Trend: 91.9%

Ln Slope: -8.0E-05

LR Concentration Trend: PD

Consolidation Data Table:

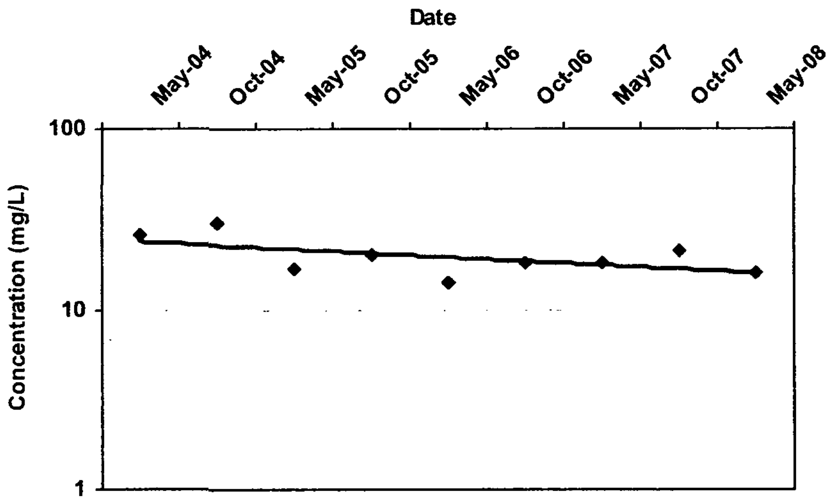
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-7	S	5/3/2004	VANADIUM	2.4E+00		1	1
KM-7	S	10/13/2004	VANADIUM	2.3E+00		1	1
KM-7	S	5/3/2005	VANADIUM	2.4E+00		1	1
KM-7	S	10/25/2005	VANADIUM	2.2E+00		1	1
KM-7	S	5/15/2006	VANADIUM	2.7E+00		1	1
KM-7	S	10/23/2006	VANADIUM	2.3E+00		1	1
KM-7	S	5/14/2007	VANADIUM	2.1E+00		1	1
KM-7	S	10/15/2007	VANADIUM	2.2E+00		1	1
KM-7	S	5/5/2008	VANADIUM	2.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-8
Well Type: S
COC: VANADIUM

Time Period: 5/1/2004 to 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.25

Confidence in Trend: 95.2%

Ln Slope: -2.8E-04

LR Concentration Trend: D

Consolidation Data Table:

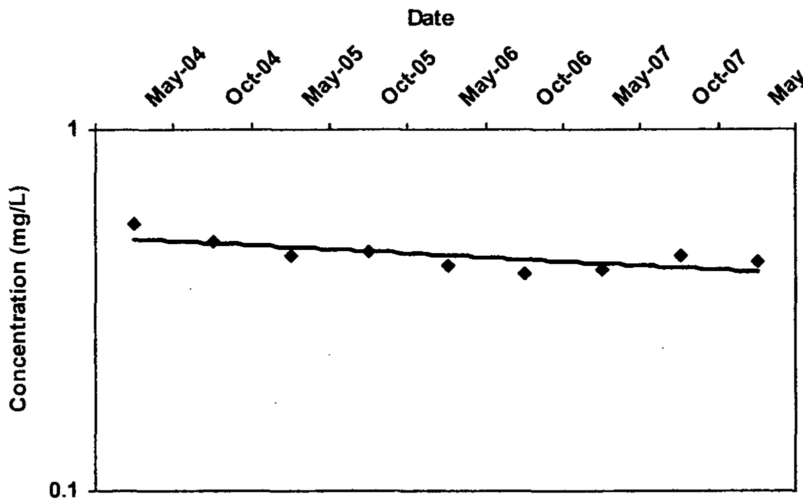
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-8	S	5/3/2004	VANADIUM	2.6E+01		1	1
KM-8	S	10/13/2004	VANADIUM	3.0E+01		1	1
KM-8	S	5/3/2005	VANADIUM	1.7E+01		1	1
KM-8	S	10/25/2005	VANADIUM	2.0E+01		1	1
KM-8	S	5/15/2006	VANADIUM	1.4E+01		1	1
KM-8	S	10/23/2006	VANADIUM	1.8E+01		1	1
KM-8	S	5/14/2007	VANADIUM	1.8E+01		1	1
KM-8	S	10/15/2007	VANADIUM	2.1E+01		1	1
KM-8	S	5/5/2008	VANADIUM	1.6E+01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-9
Well Type: S
COC: VANADIUM

Time Period: 5/1/2004 to 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.10

Confidence in Trend: 98.7%

Ln Slope: -1.4E-04

LR Concentration Trend: D

Consolidation Data Table:

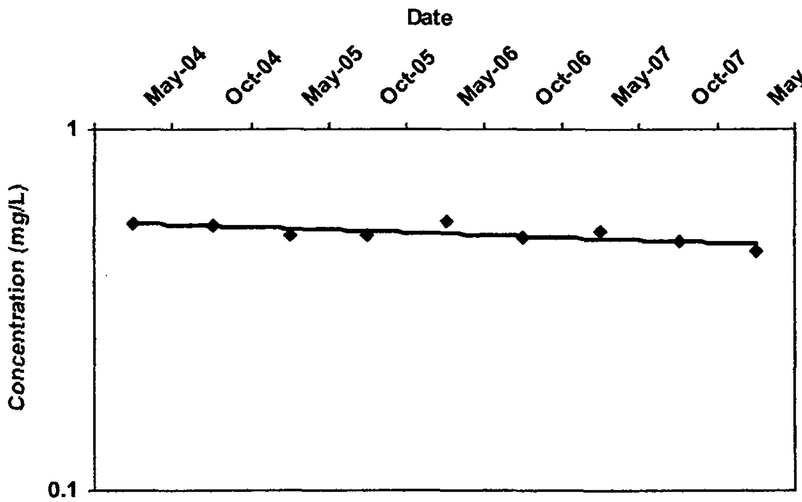
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-9	S	5/3/2004	VANADIUM	5.5E-01		1	1
KM-9	S	10/13/2004	VANADIUM	4.9E-01		1	1
KM-9	S	5/3/2005	VANADIUM	4.5E-01		1	1
KM-9	S	10/25/2005	VANADIUM	4.6E-01		1	1
KM-9	S	5/15/2006	VANADIUM	4.2E-01		1	1
KM-9	S	10/23/2006	VANADIUM	4.0E-01		1	1
KM-9	S	5/14/2007	VANADIUM	4.1E-01		1	1
KM-9	S	10/15/2007	VANADIUM	4.5E-01		1	1
KM-9	S	5/5/2008	VANADIUM	4.3E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-13
Well Type: S
COC: VANADIUM

Time Period: 5/1/2004 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.06

Confidence in Trend: 98.7%

Ln Slope: -8.9E-05

LR Concentration Trend: D

Consolidation Data Table:

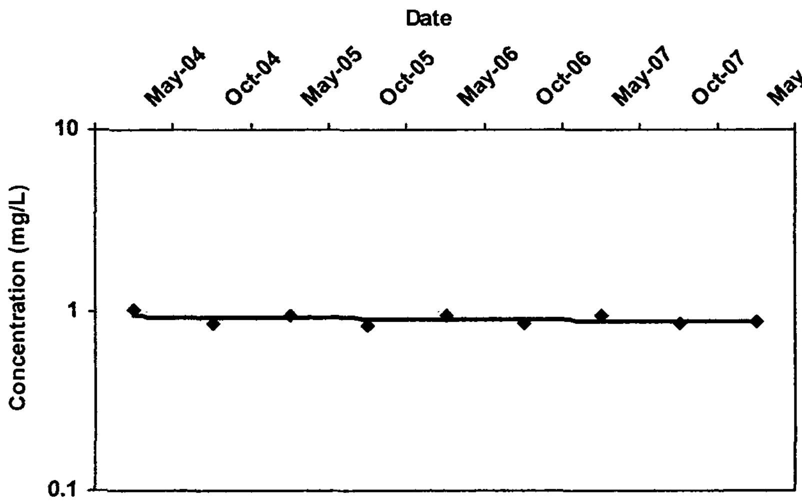
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-13	S	5/3/2004	VANADIUM	5.5E-01		1	1
KM-13	S	10/13/2004	VANADIUM	5.4E-01		1	1
KM-13	S	5/3/2005	VANADIUM	5.1E-01		1	1
KM-13	S	10/25/2005	VANADIUM	5.1E-01		1	1
KM-13	S	5/15/2006	VANADIUM	5.6E-01		1	1
KM-13	S	10/23/2006	VANADIUM	5.0E-01		1	1
KM-13	S	5/14/2007	VANADIUM	5.2E-01		1	1
KM-13	S	10/15/2007	VANADIUM	4.9E-01		1	1
KM-13	S	5/5/2008	VANADIUM	4.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-15
Well Type: T
COC: VANADIUM

Time Period: 5/1/2004 to 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.07

Confidence in Trend: 83.5%

Ln Slope: -4.9E-05

LR Concentration Trend: S

Consolidation Data Table:

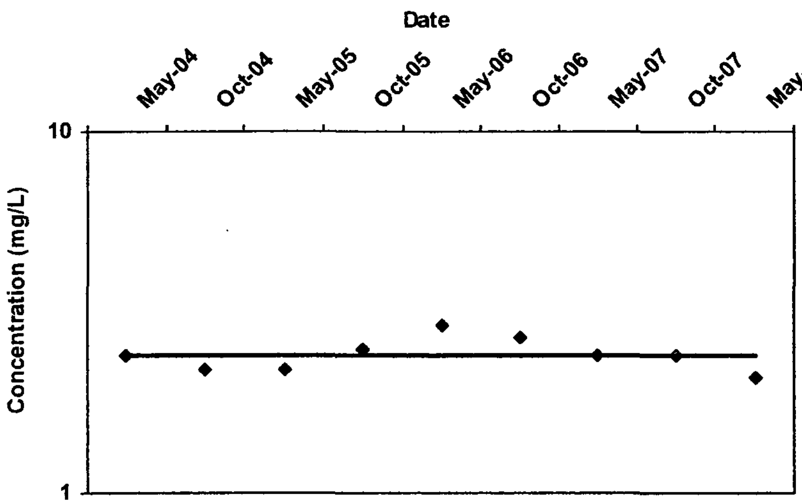
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-15	T	5/3/2004	VANADIUM	1.0E+00		1	1
KM-15	T	10/13/2004	VANADIUM	8.5E-01		1	1
KM-15	T	5/3/2005	VANADIUM	9.3E-01		1	1
KM-15	T	10/25/2005	VANADIUM	8.3E-01		1	1
KM-15	T	5/15/2006	VANADIUM	9.5E-01		1	1
KM-15	T	10/23/2006	VANADIUM	8.5E-01		1	1
KM-15	T	5/14/2007	VANADIUM	9.4E-01		1	1
KM-15	T	10/15/2007	VANADIUM	8.5E-01		1	1
KM-15	T	5/5/2008	VANADIUM	8.6E-01		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-16
Well Type: T
COC: VANADIUM

Time Period: 5/1/2004 **to** 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.10

Confidence in Trend: 100.0%

Ln Slope: -8.8E-07

LR Concentration Trend: D

Consolidation Data Table:

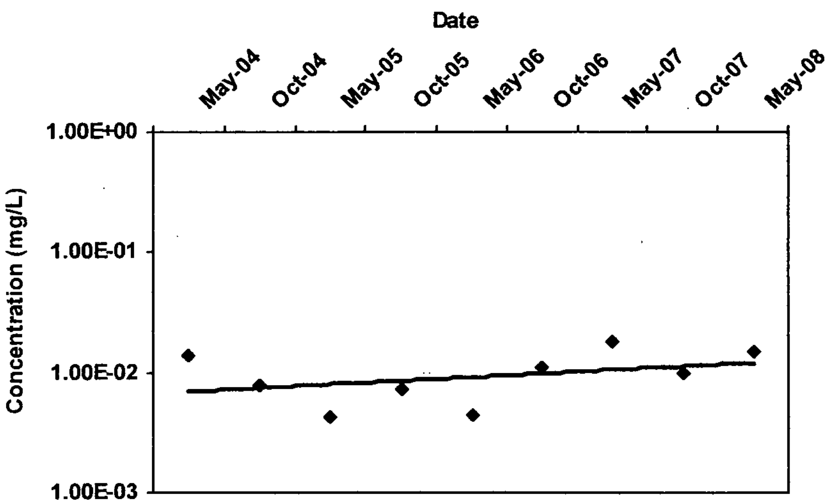
Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-16	T	5/3/2004	VANADIUM	2.4E+00		1	1
KM-16	T	10/13/2004	VANADIUM	2.2E+00		1	1
KM-16	T	5/3/2005	VANADIUM	2.2E+00		1	1
KM-16	T	10/25/2005	VANADIUM	2.5E+00		1	1
KM-16	T	5/15/2006	VANADIUM	2.9E+00		1	1
KM-16	T	10/23/2006	VANADIUM	2.7E+00		1	1
KM-16	T	5/14/2007	VANADIUM	2.4E+00		1	1
KM-16	T	10/15/2007	VANADIUM	2.4E+00		1	1
KM-16	T	5/5/2008	VANADIUM	2.1E+00		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

MAROS Linear Regression Statistics

Well: KM-17
Well Type: T
COC: VANADIUM

Time Period: 5/1/2004 to 5/8/2008
Consolidation Period: No Time Consolidation
Consolidation Type: Geometric Mean
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value



COV: 0.46

Confidence in Trend: 84.0%

Ln Slope: 3.8E-04

LR Concentration Trend: NT

Consolidation Data Table:

Well	Well Type	Consolidation Date	Constituent	Result (mg/L)	Flag	Number of Samples	Number of Detects
KM-17	T	5/3/2004	VANADIUM	1.4E-02		1	1
KM-17	T	10/13/2004	VANADIUM	8.0E-03		1	1
KM-17	T	5/3/2005	VANADIUM	4.3E-03		1	1
KM-17	T	10/25/2005	VANADIUM	7.4E-03		1	1
KM-17	T	5/15/2006	VANADIUM	4.4E-03		1	1
KM-17	T	10/23/2006	VANADIUM	1.1E-02		1	1
KM-17	T	5/14/2007	VANADIUM	1.8E-02		1	1
KM-17	T	10/15/2007	VANADIUM	1.0E-02		1	1
KM-17	T	5/5/2008	VANADIUM	1.5E-02		1	1

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); ND = All Samples are Non-detect

APPENDIX C

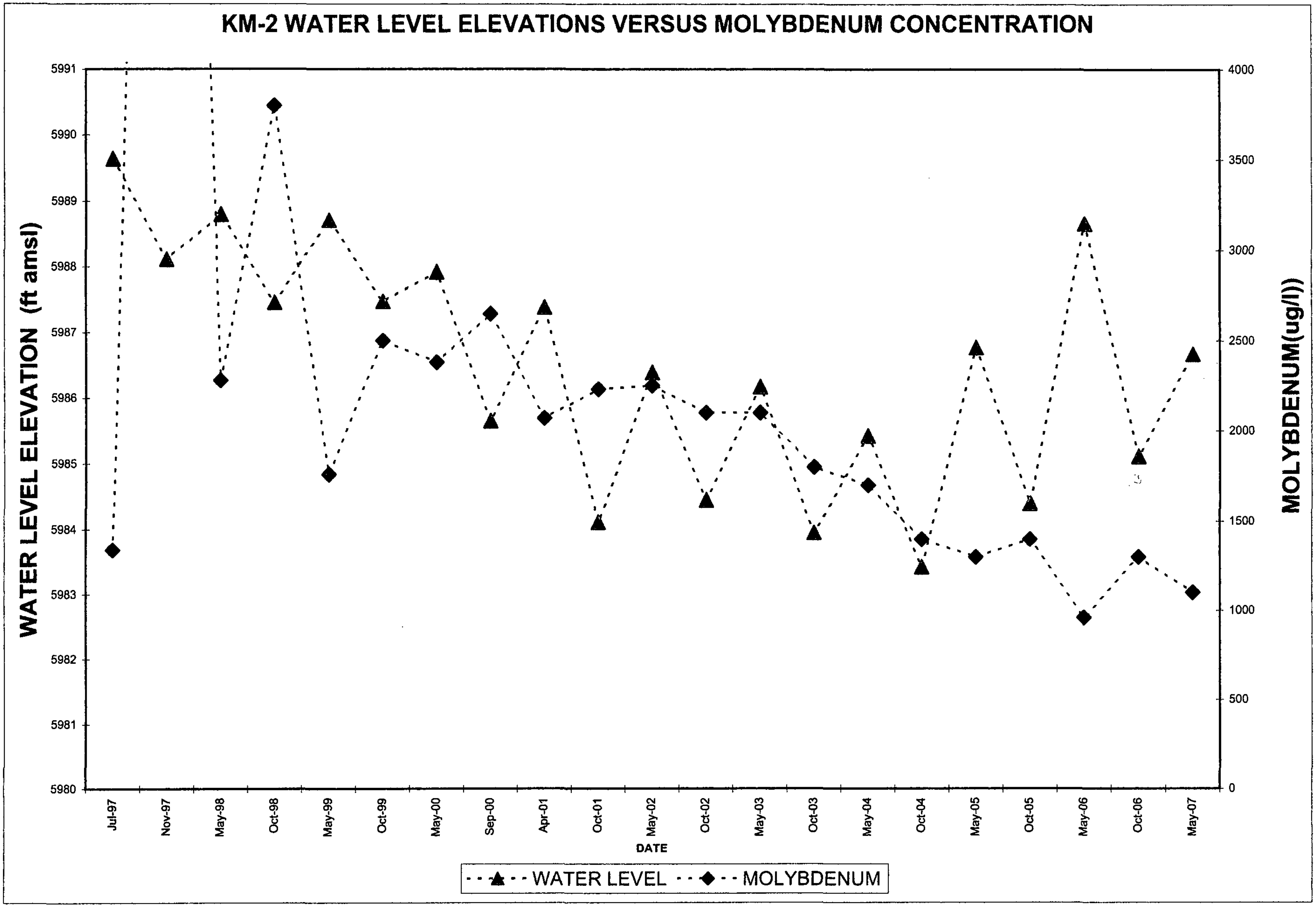

KM-2 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
5991
5990
5989
5988
5987
5986
5985
5984
5983
5982
5981
5980
MOLYBDENUM(ug/l))
4000
3500
3000
2500
2000
1500
1000
500
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MOLYBDENUM

FIGURE C-1

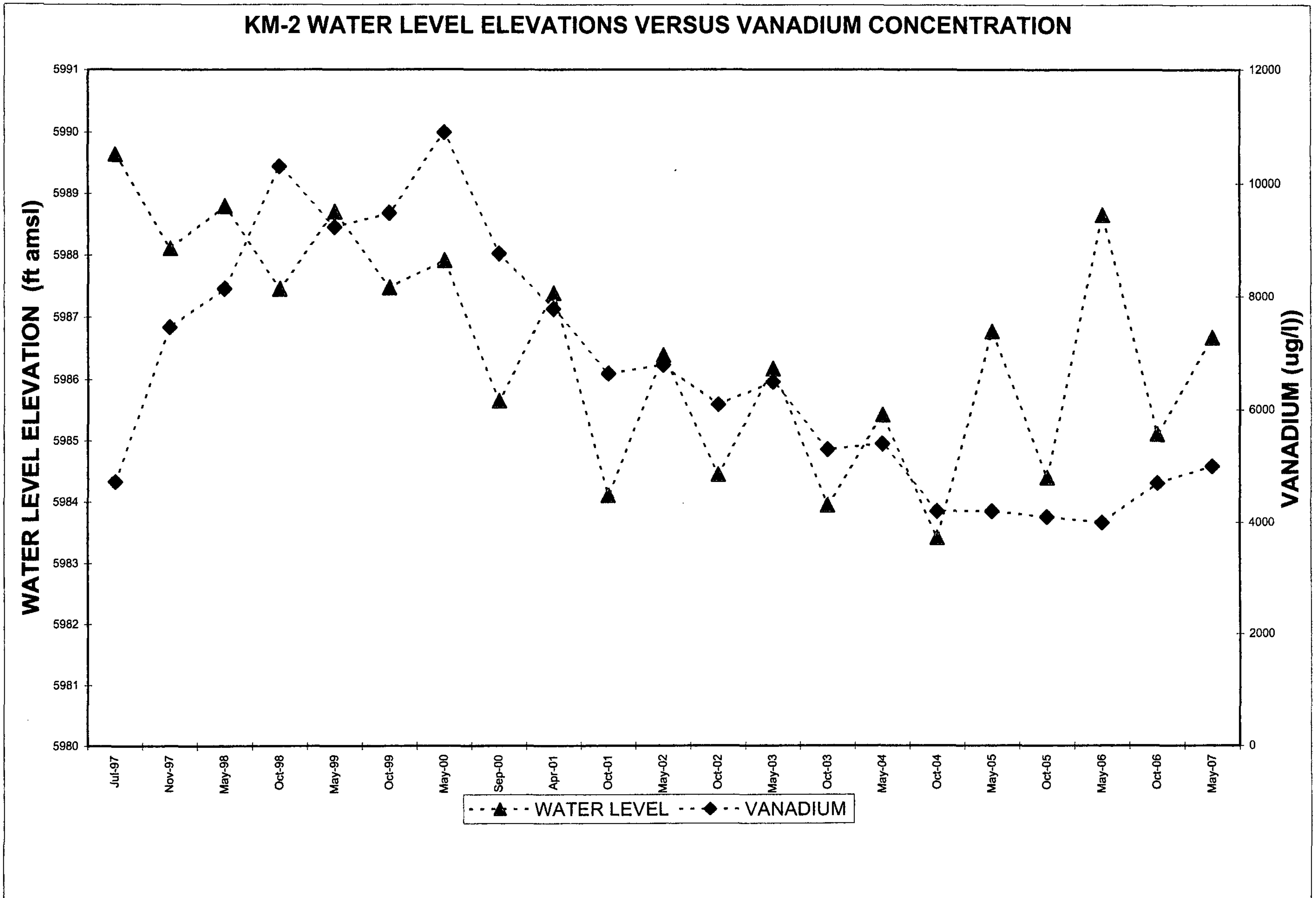

KM-2 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
VANADIUM (ug/l))
5991
5990
5989
5988
5987
5986
5985
5984
5983
5982
5981
5980
12000
10000
8000
6000
4000
2000
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
WATER LEVEL
VANADIUM

FIGURE C-2

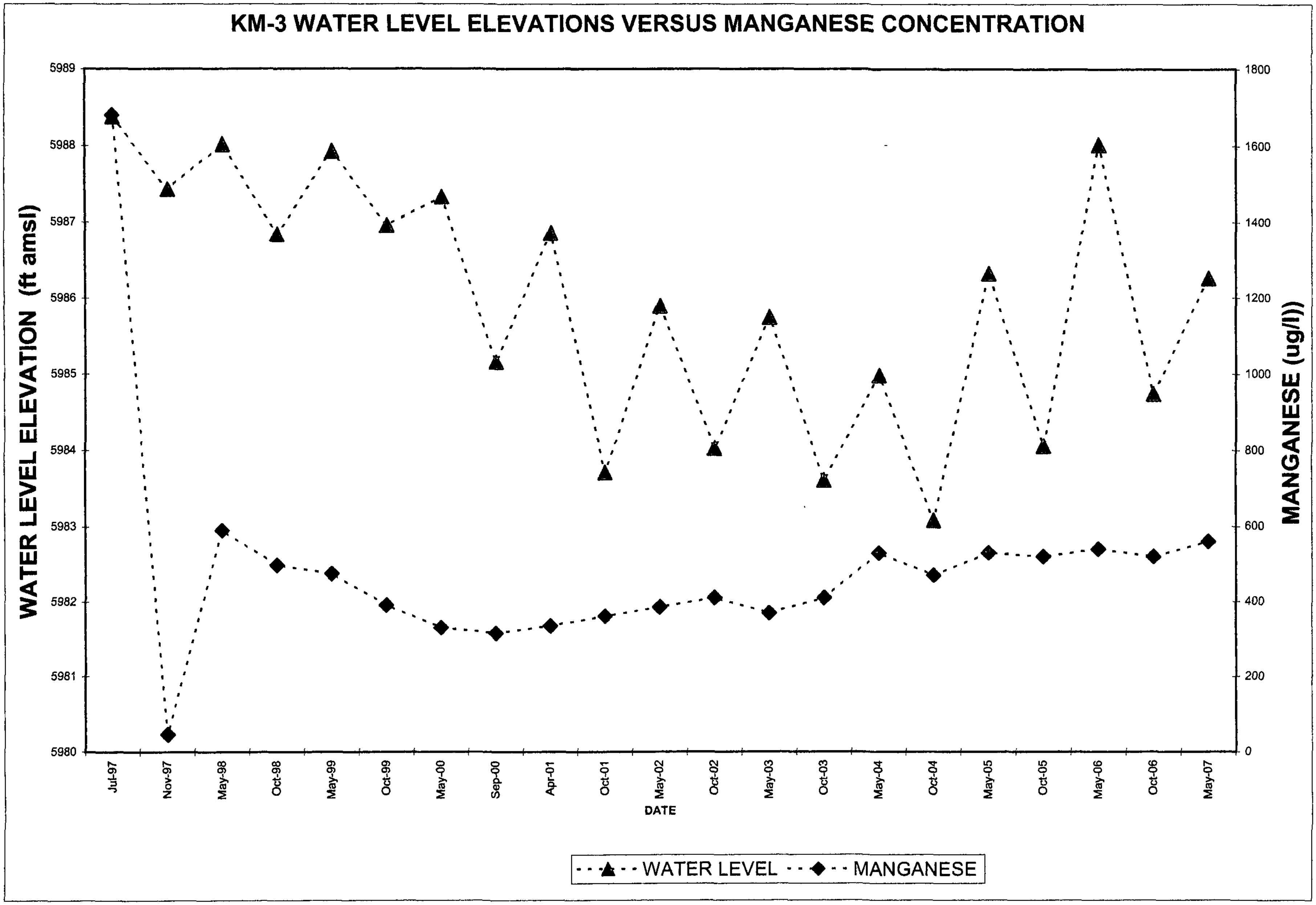

KM-3 WATER LEVEL ELEVATIONS VERSUS MANGANESE CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MANGANESE (ug/l))
DATE
5989
5988
5987
5986
5985
5984
5983
5982
5981
5980
1800
1600
1400
1200
1000
800
600
400
200
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
WATER LEVEL
MANGANESE

FIGURE C-3

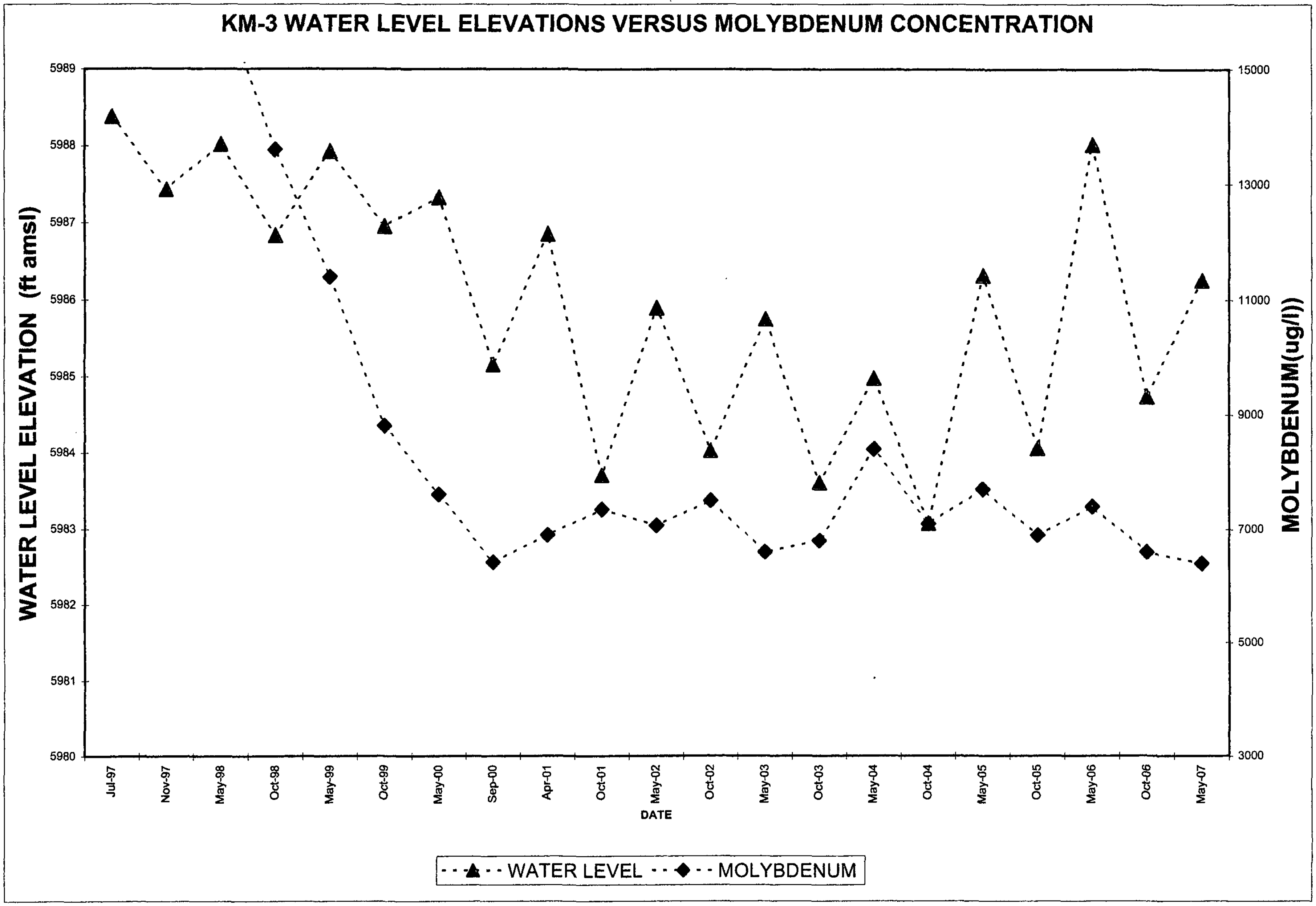

KM-3 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MOLYBDENUM(ug/l))
5989
5988
5987
5986
5985
5984
5983
5982
5981
5980
15000
13000
11000
9000
7000
5000
3000
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MOLYBDENUM

FIGURE C-4

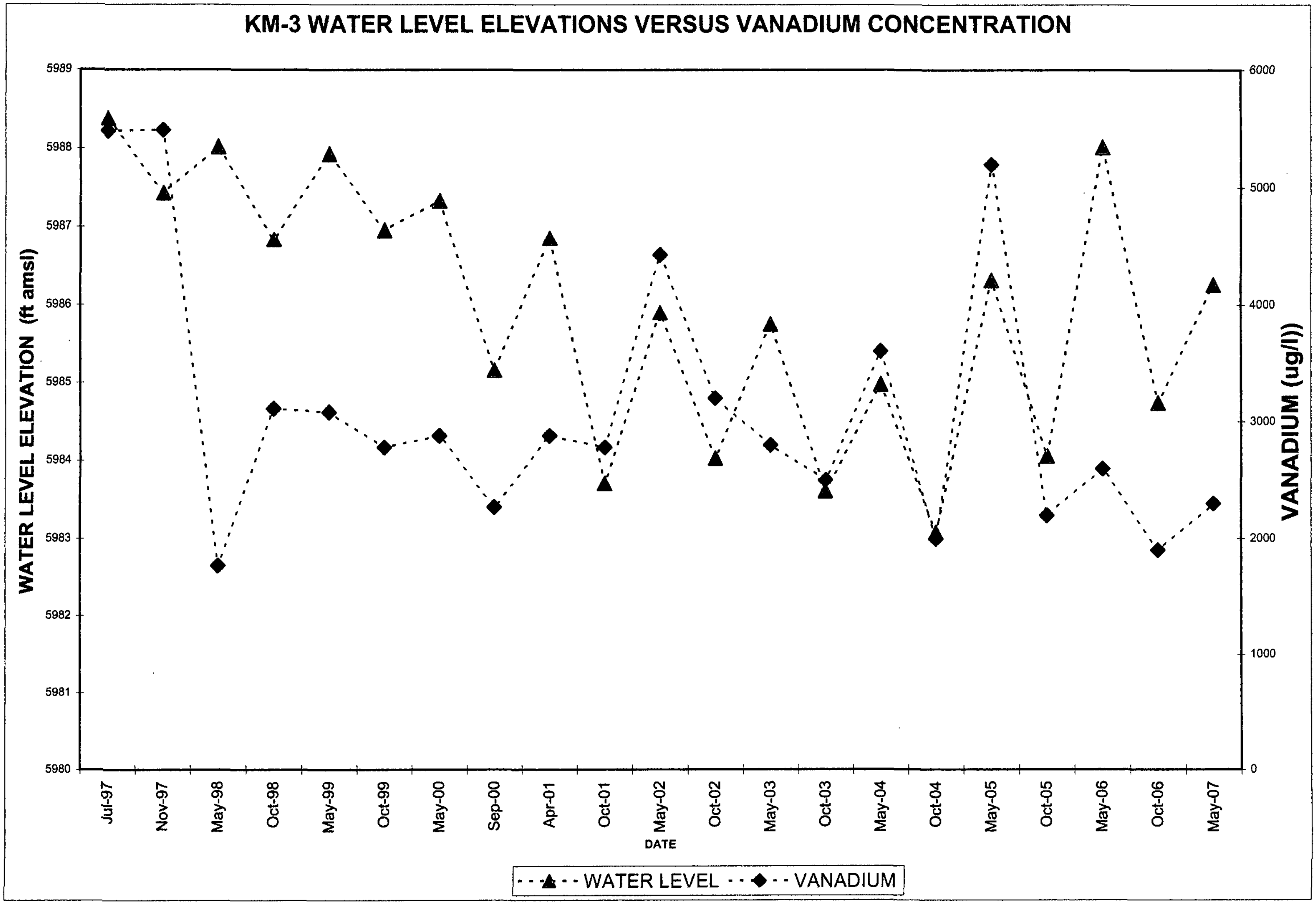

KM-3 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
5989
5988
5987
5986
5985
5984
5983
5982
5981
5980
VANADIUM (ug/l))
6000
5000
4000
3000
2000
1000
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
VANADIUM

FIGURE C-5

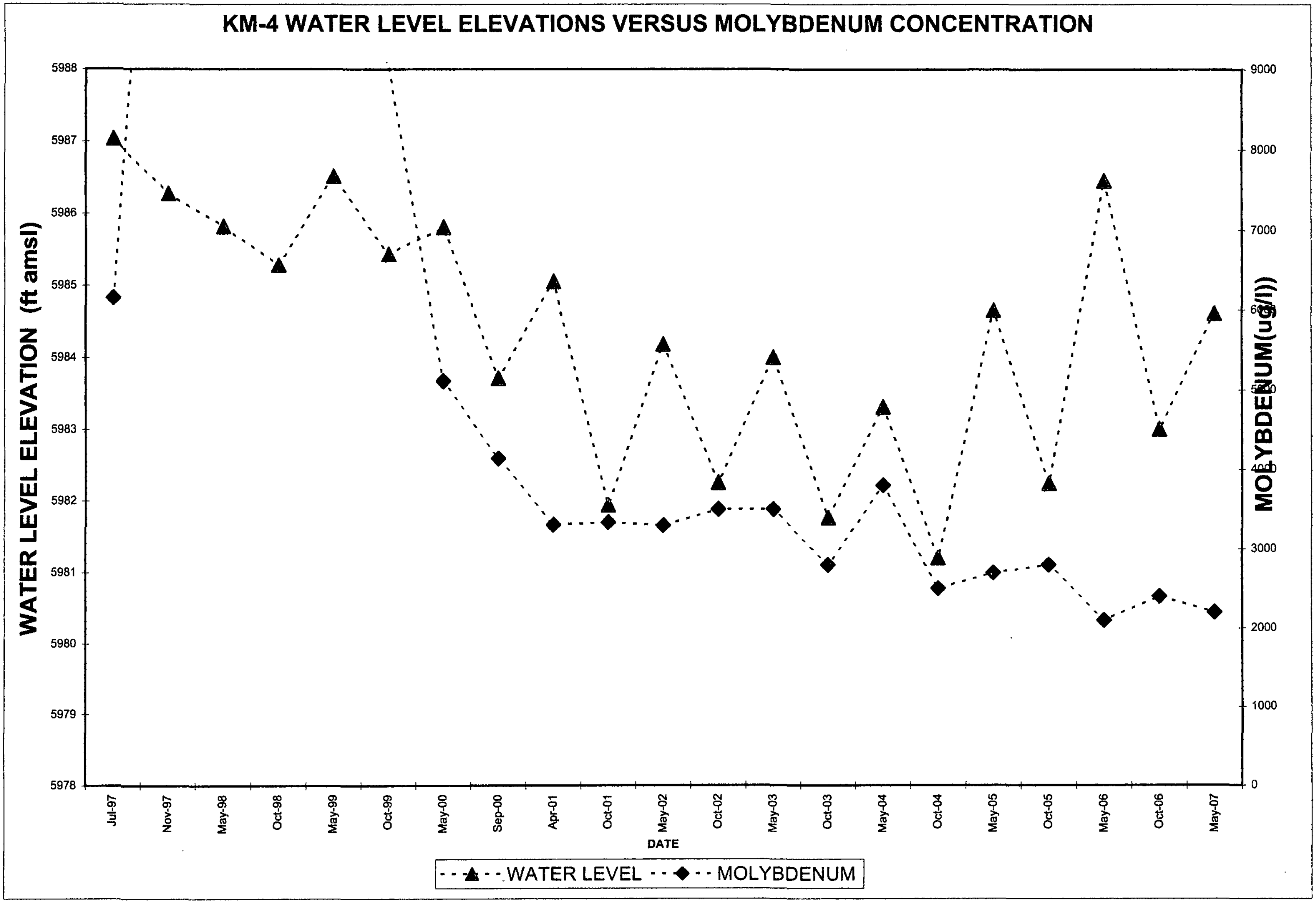

KM-4 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MOLYBDENUM(ug/l))
5988
5987
5986
5985
5984
5983
5982
5981
5980
5979
5978
9000
8000
7000
3000
2000
1000
0
Jul-97 Nov-97 May-98 Oct-98 May-99 Oct-99 May-00 Sep-00 Apr-01 Oct-01 May-02 Oct-02 May-03 Oct-03 May-04 Oct-04 May-05 Oct-05 May-06 Oct-06 May-07
DATE
WATER LEVEL
MOLYBDENUM

FIGURE C-6

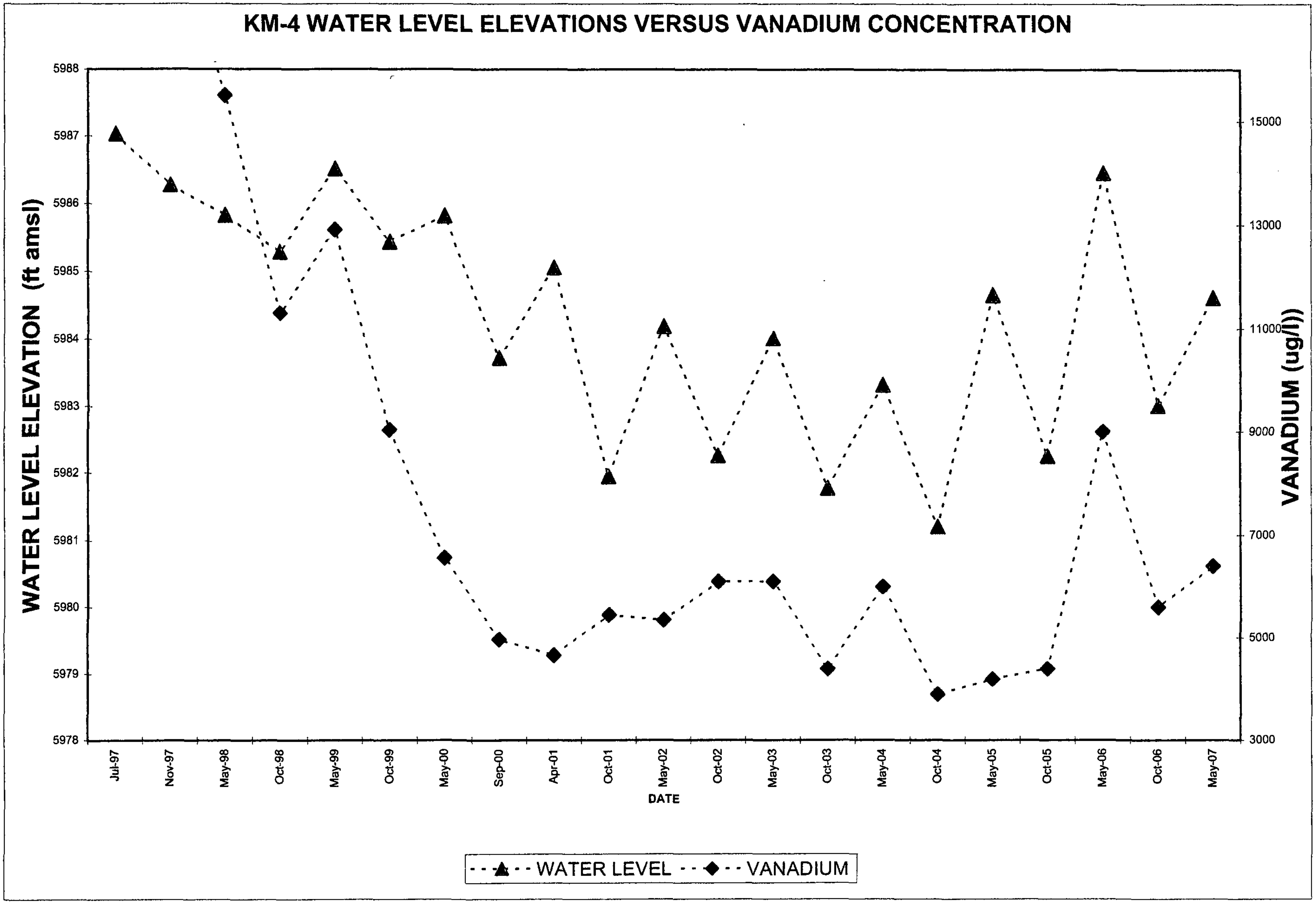

KM-4 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
5988
5987
5986
5985
5984
5983
5982
5981
5980
5979
5978
VANADIUM (ug/l))
15000
13000
11000
9000
7000
5000
3000
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
VANADIUM

FIGURE C-7

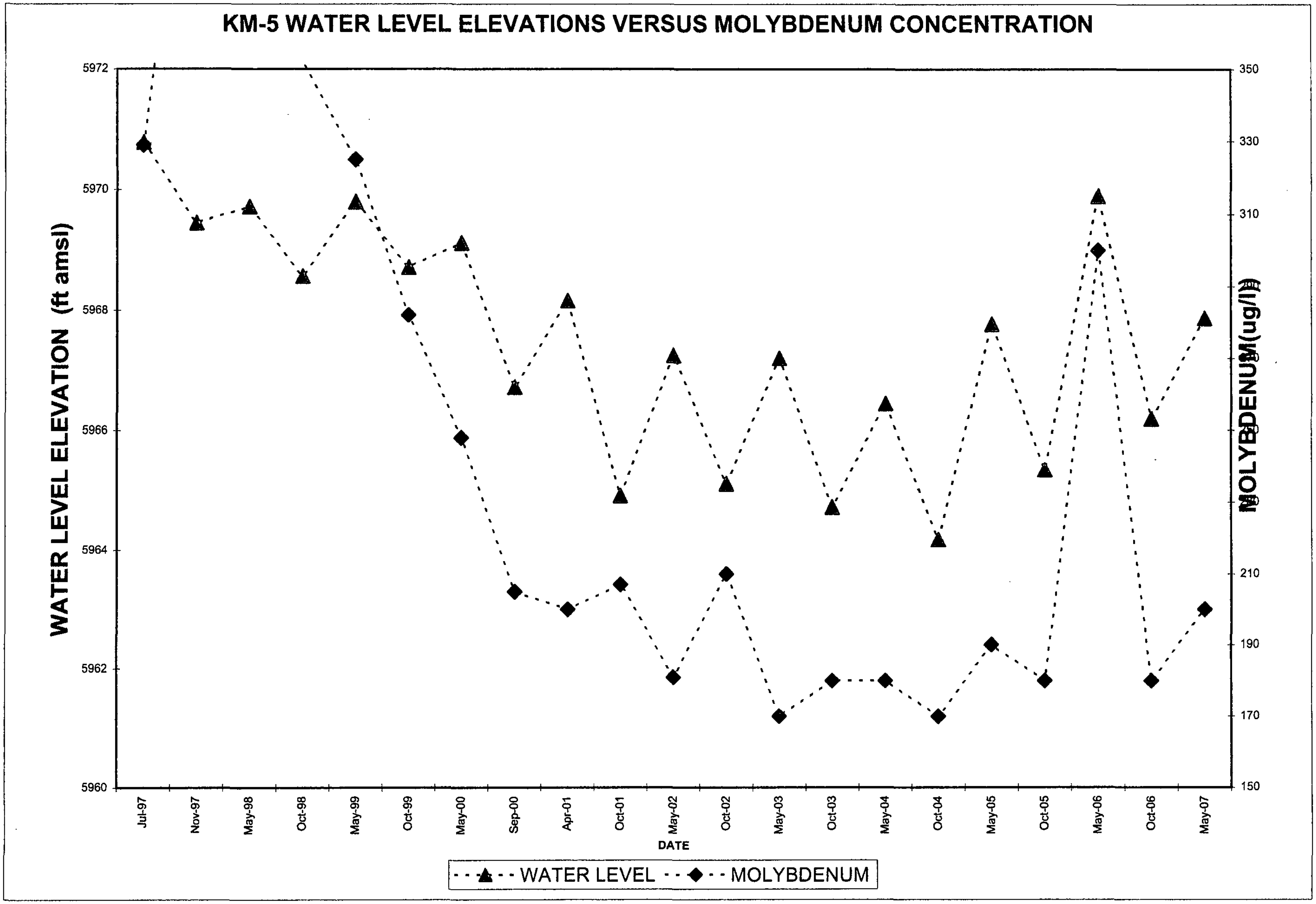

KM-5 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MOLYBDENUM (ug/l)
5972
5970
5968
5966
5964
5962
5960
350
330
310
210
190
170
150
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MOLYBDENUM

FIGURE C-8

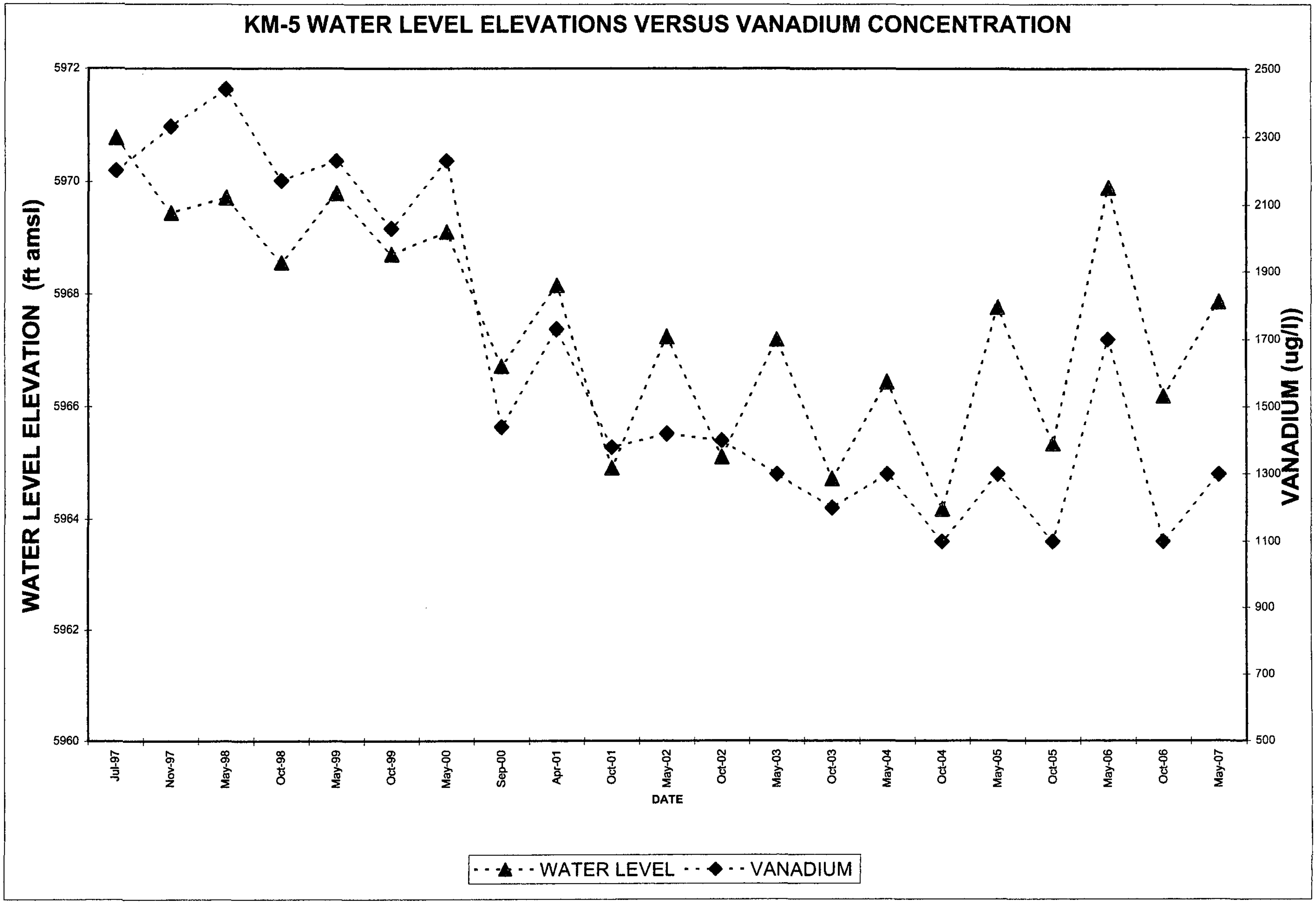

KM-5 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
VANADIUM (ug/l))
5972
5970
5968
5966
5964
5962
5960
2500
2300
2100
1900
1700
1500
1300
1100
900
700
500
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
VANADIUM

FIGURE C-9

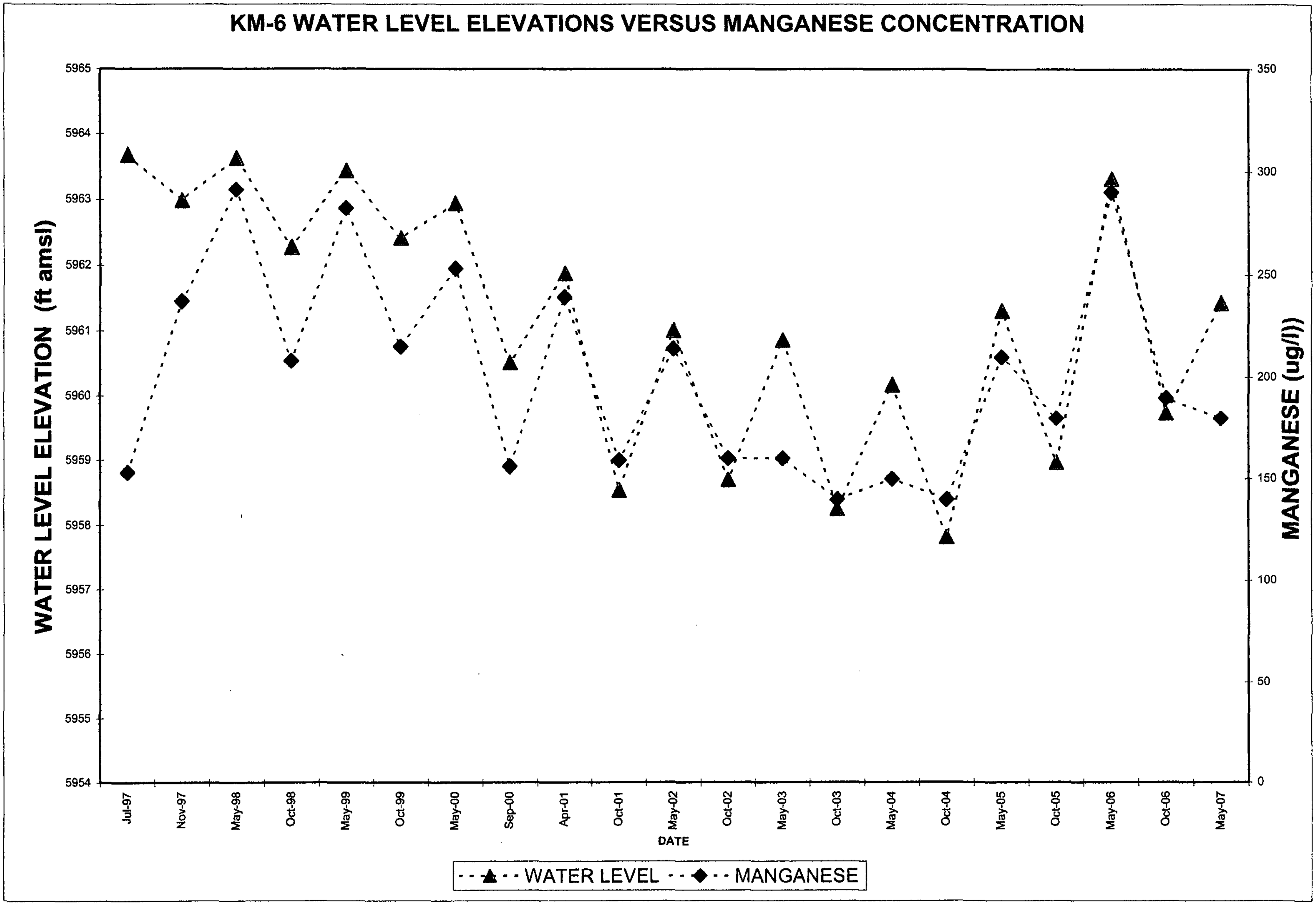

KM-6 WATER LEVEL ELEVATIONS VERSUS MANGANESE CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MANGANESE (ug/l))
5965
5964
5963
5962
5961
5960
5959
5958
5957
5956
5955
5954
350
300
250
200
150
100
50
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MANGANESE

FIGURE C-10

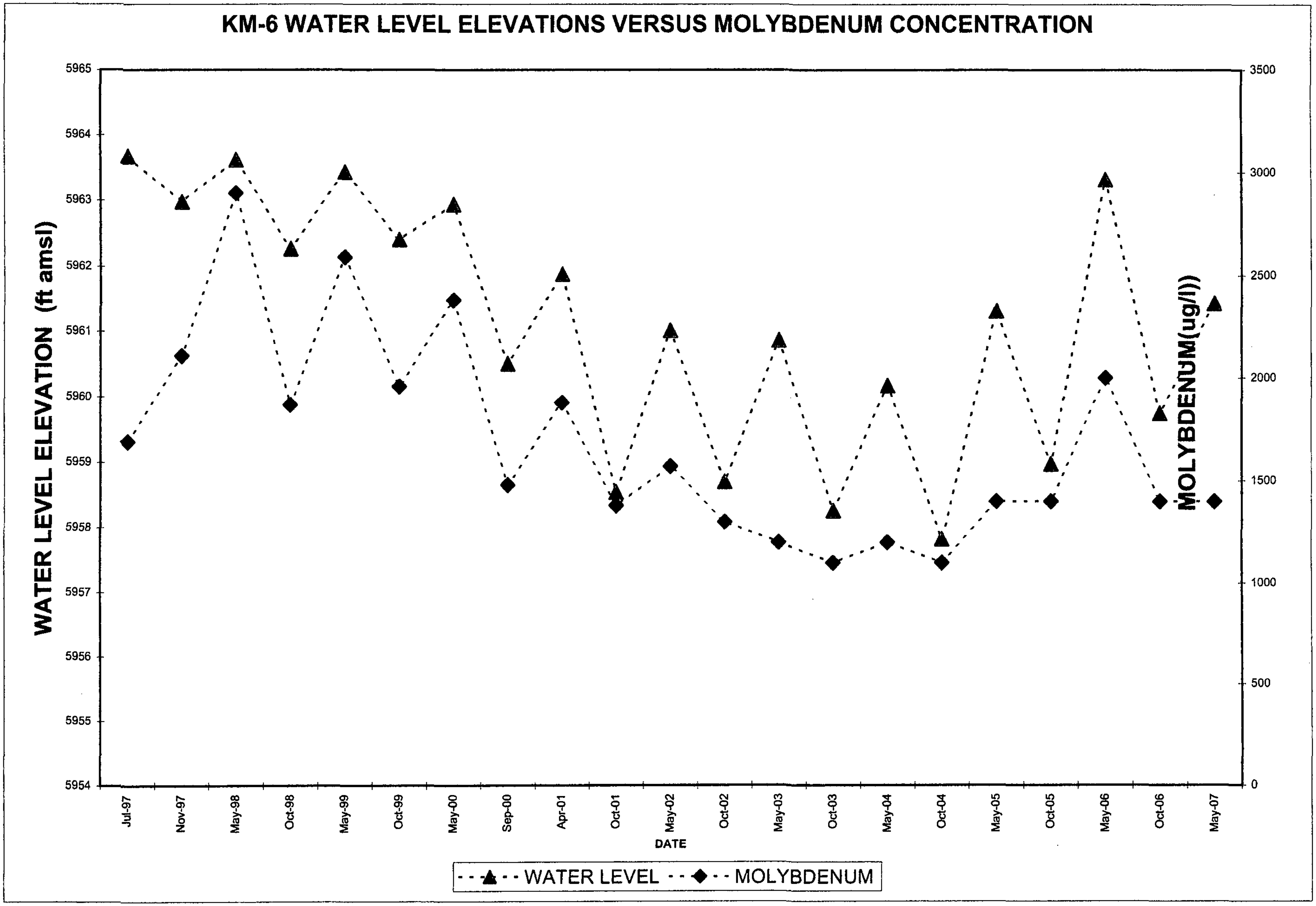

KM-6 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MOLYBDENUM(ug/l))
5965
5964
5963
5962
5961
5960
5959
5958
5957
5956
5955
5954
3500
3000
2500
2000
1500
1000
500
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MOLYBDENUM

FIGURE C-11

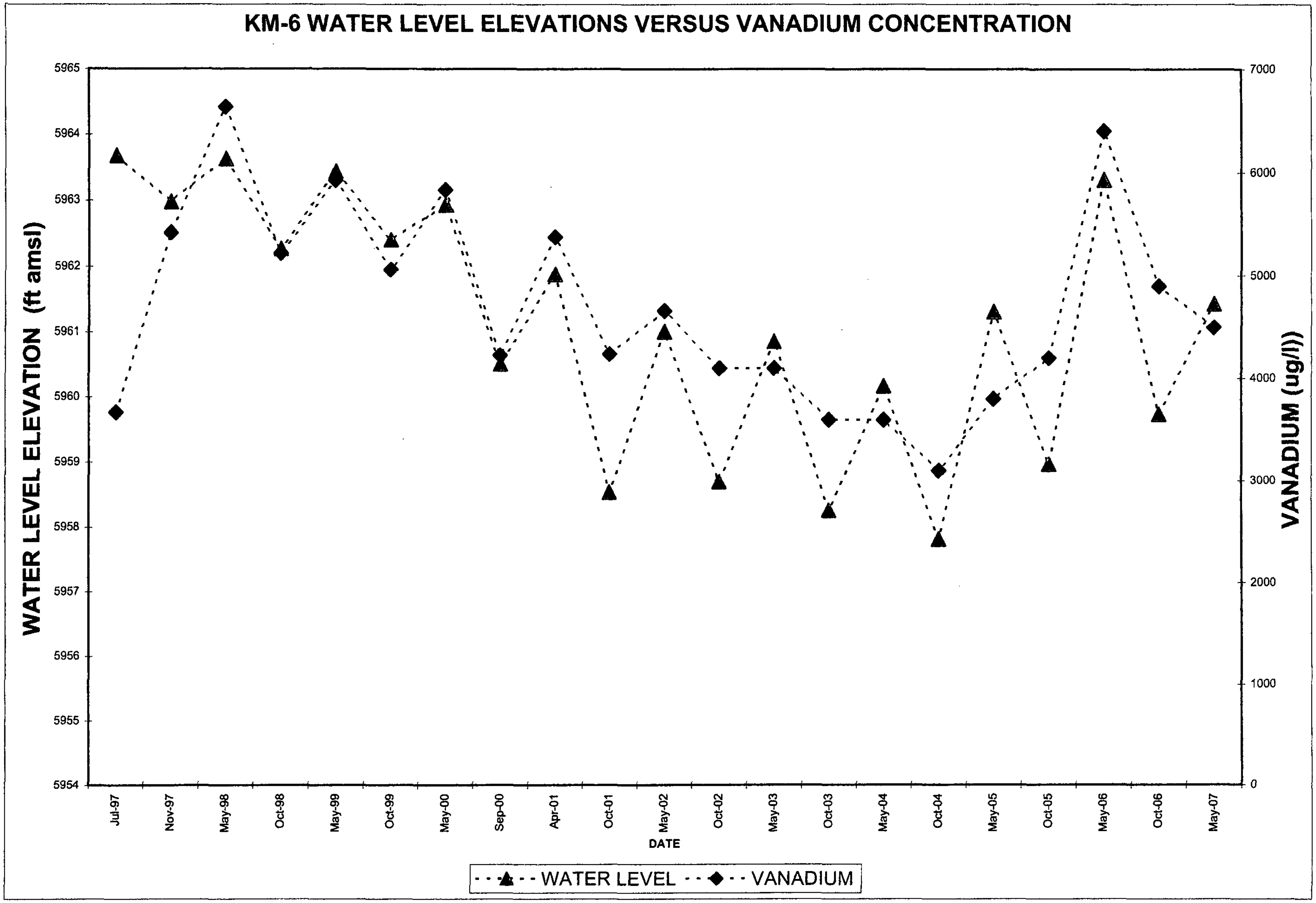

KM-6 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
VANADIUM (ug/l)
5965
5964
5963
5962
5961
5960
5959
5958
5957
5956
5955
5954
7000
6000
5000
4000
3000
2000
1000
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
VANADIUM

FIGURE C-12

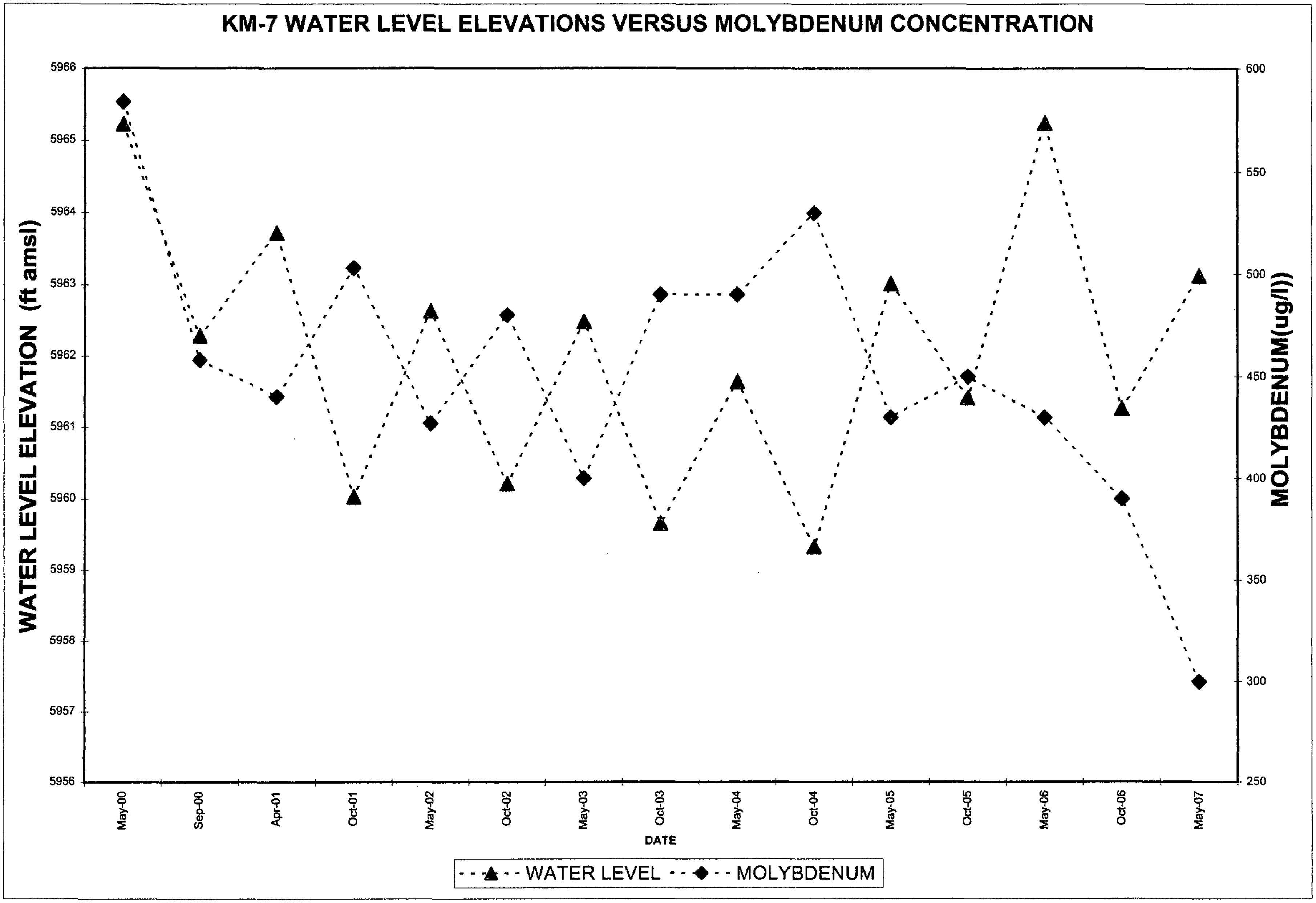

KM-7 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MOLYBDENUM(ug/l))
5966
5965
5964
5963
5962
5961
5960
5959
5958
5957
5956
600
550
500
450
400
350
300
250
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MOLYBDENUM

FIGURE C-13

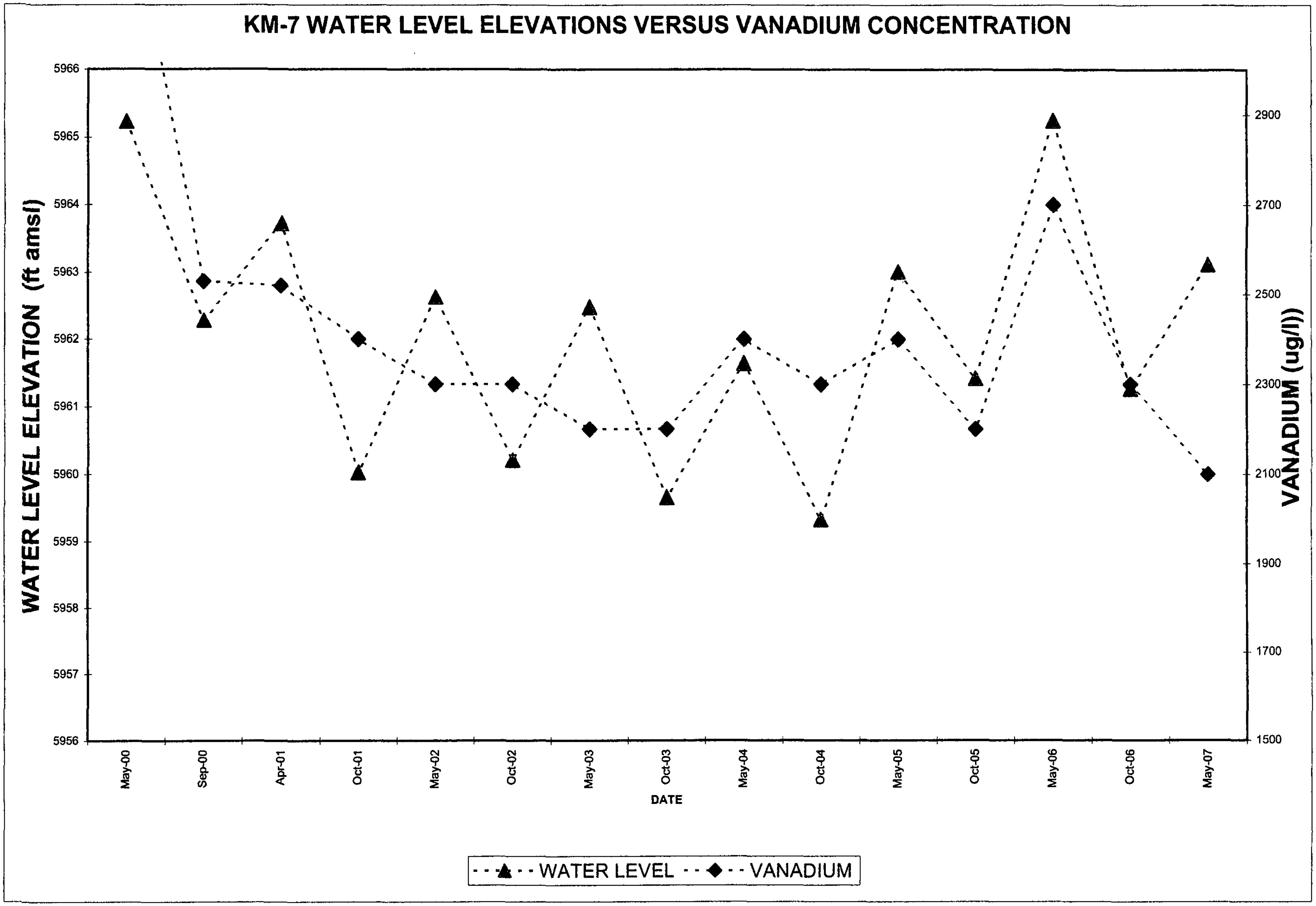

KM-7 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
VANADIUM (ug/l))
5966
5965
5964
5963
5962
5961
5960
5959
5958
5957
5956
2900
2700
2500
2300
2100
1900
1700
1500
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
VANADIUM

FIGURE C-14

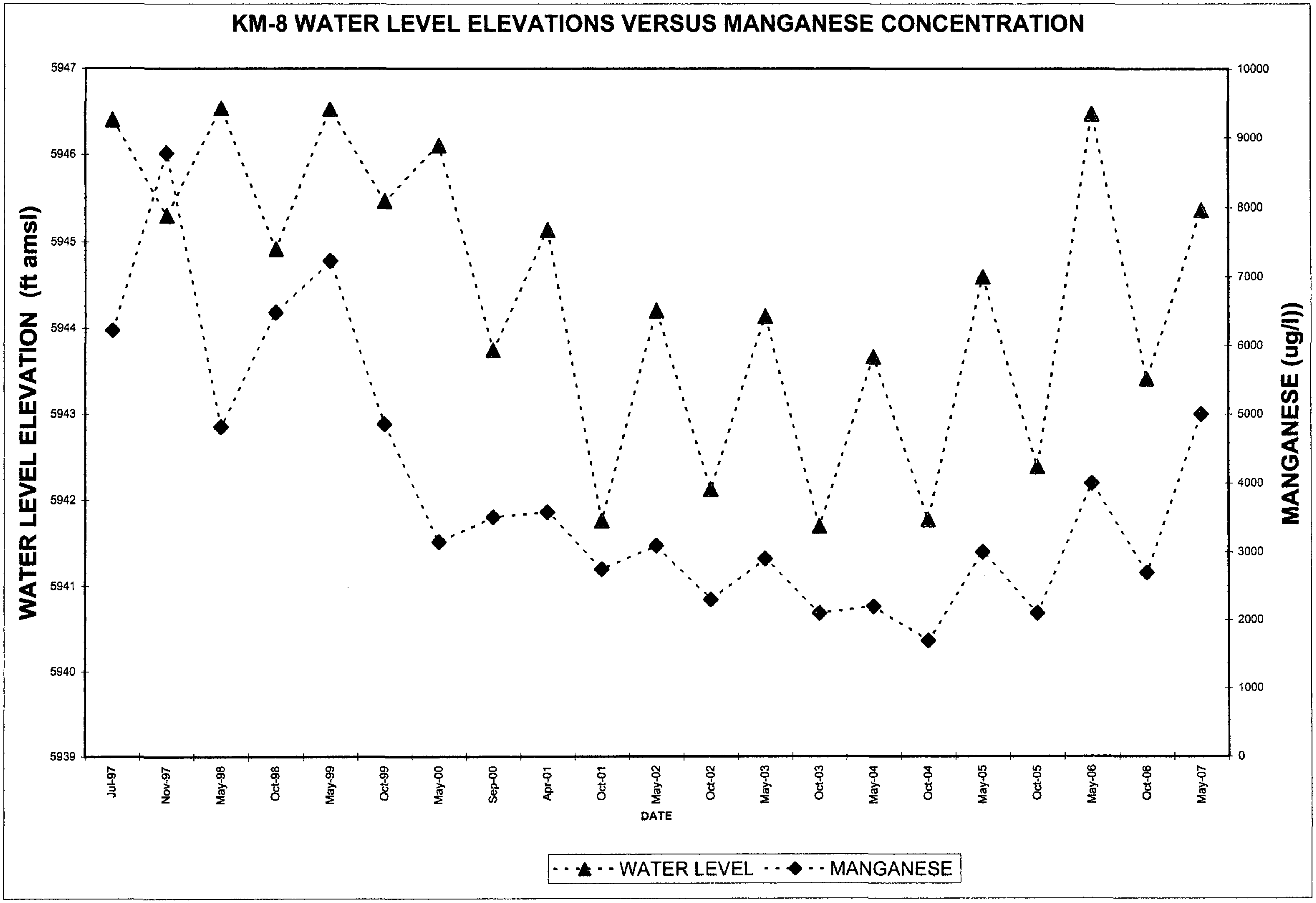
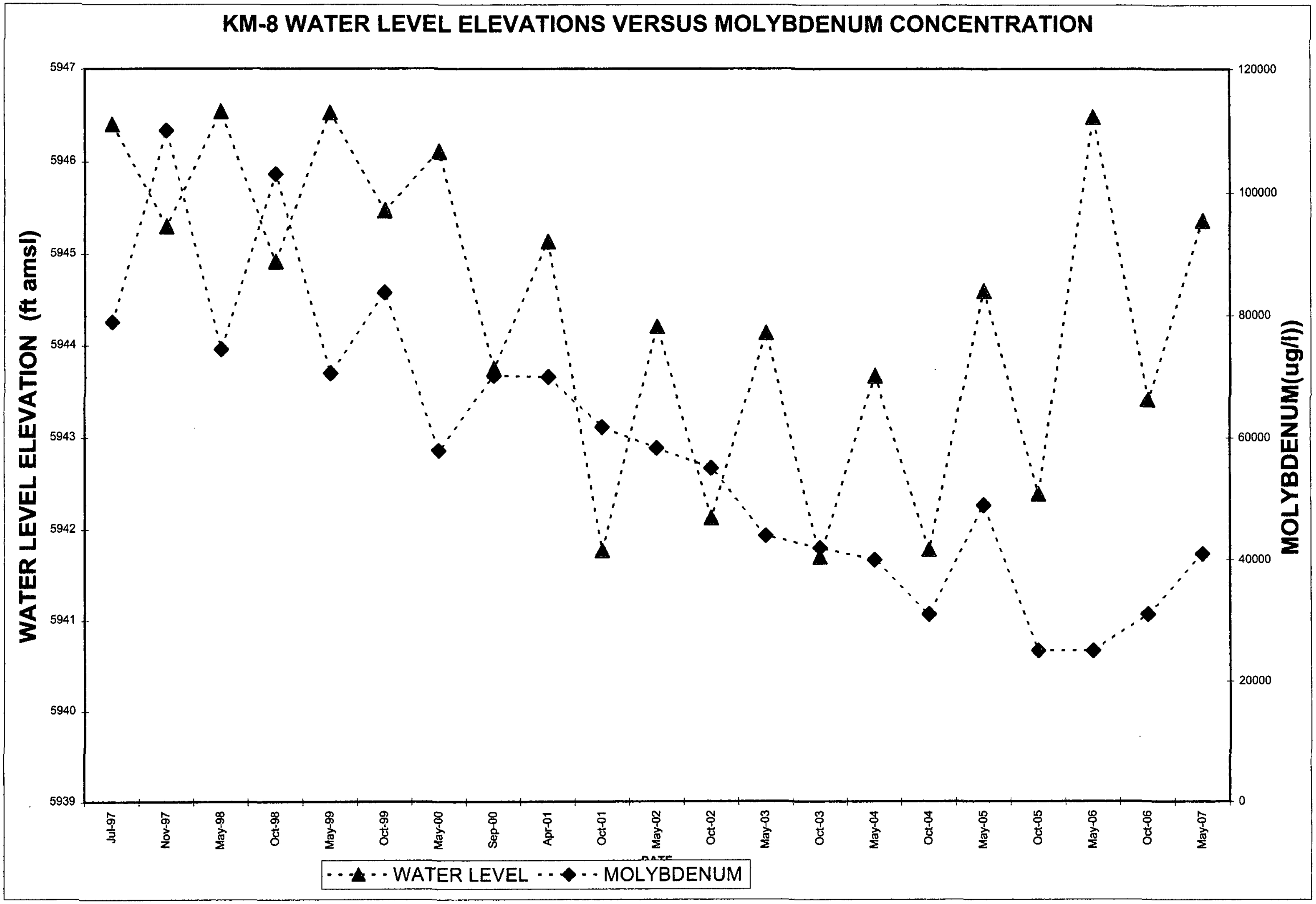

KM-8 WATER LEVEL ELEVATIONS VERSUS MANGANESE CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
5947
5946
5945
5944
5943
5942
5941
5940
5939
MANGANESE (ug/l))
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MANGANESE

FIGURE C-15



KM-8 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MOLYBDENUM(ug/l))
5947
5946
5945
5944
5943
5942
5941
5940
5939
120000
100000
80000
60000
40000
20000
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
WATER LEVEL
MOLYBDENUM

FIGURE C-16

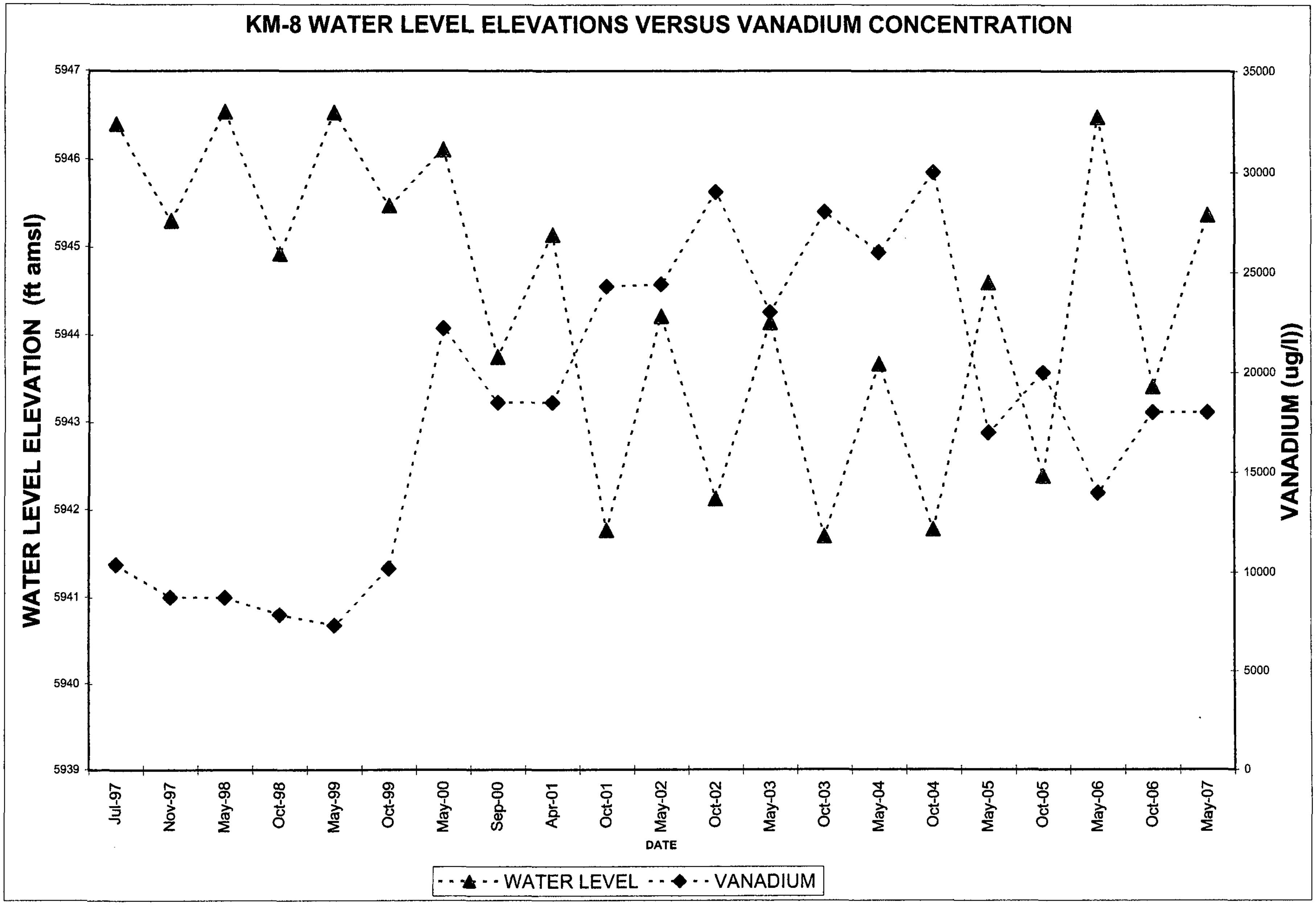

KM-8 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
VANADIUM (ug/l)
DATE
5947
5946
5945
5944
5943
5942
5941
5940
5939
35000
30000
25000
20000
15000
10000
5000
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
WATER LEVEL
VANADIUM

FIGURE C-17

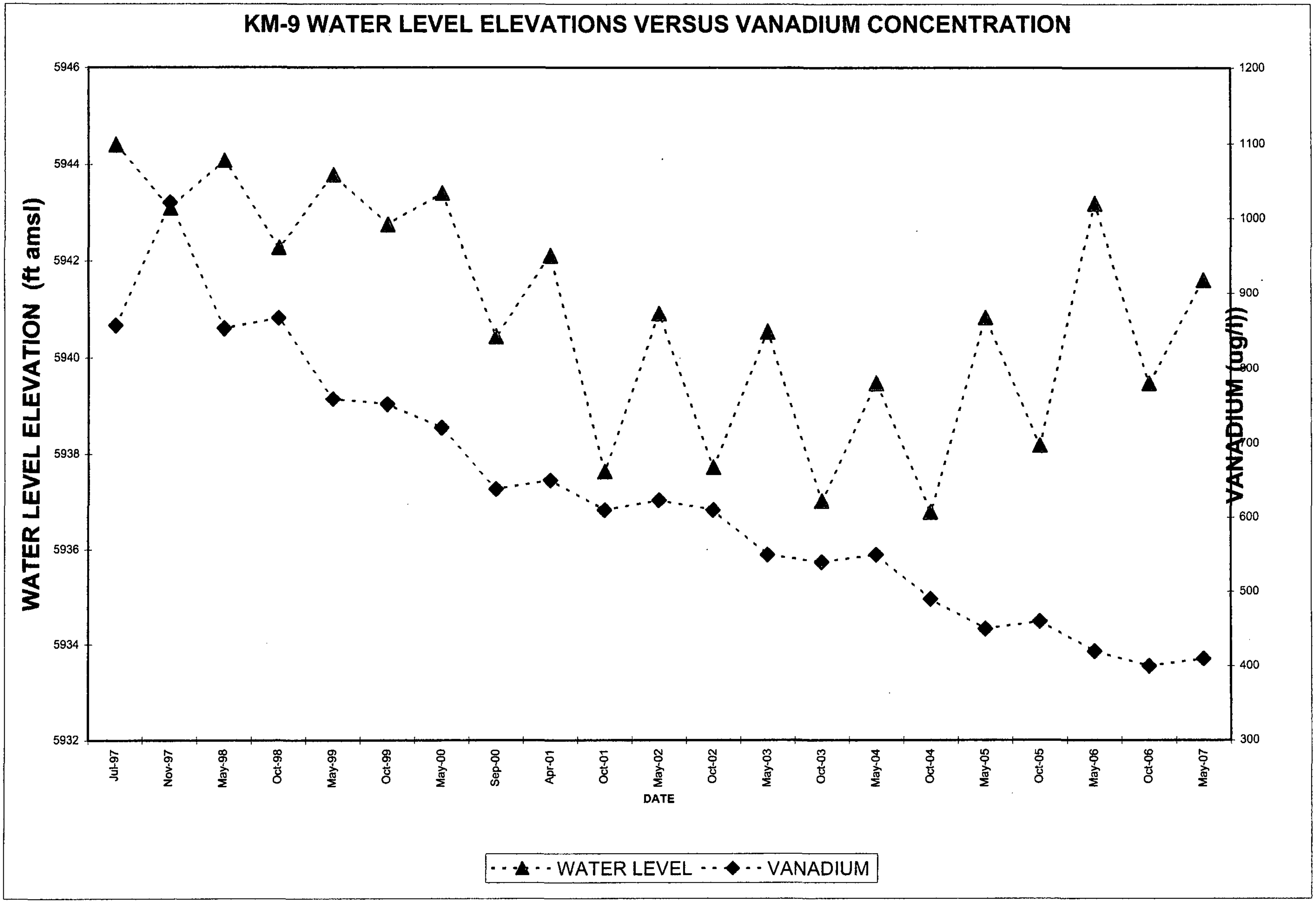

KM-9 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
VANADIUM (ug/l))
5946
5944
5942
5940
5938
5936
5934
5932
1200
1100
1000
900
800
700
600
500
400
300
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
VANADIUM

FIGURE C-18

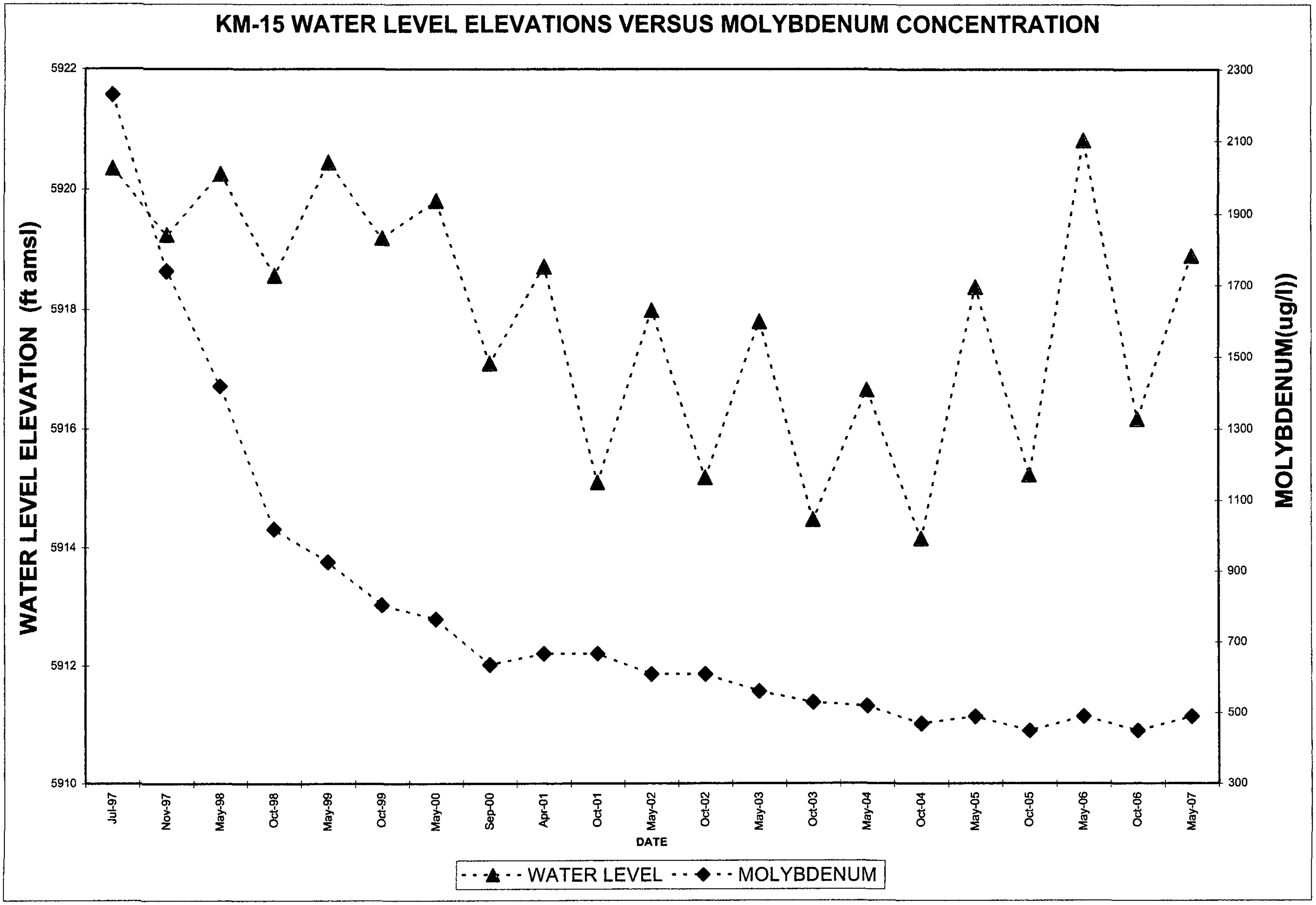

KM-15 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MOLYBDENUM(ug/l))
5922
5920
5918
5916
5914
5912
5910
2300
2100
1900
1700
1500
1300
1100
900
700
500
300
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MOLYBDENUM

FIGURE C-19

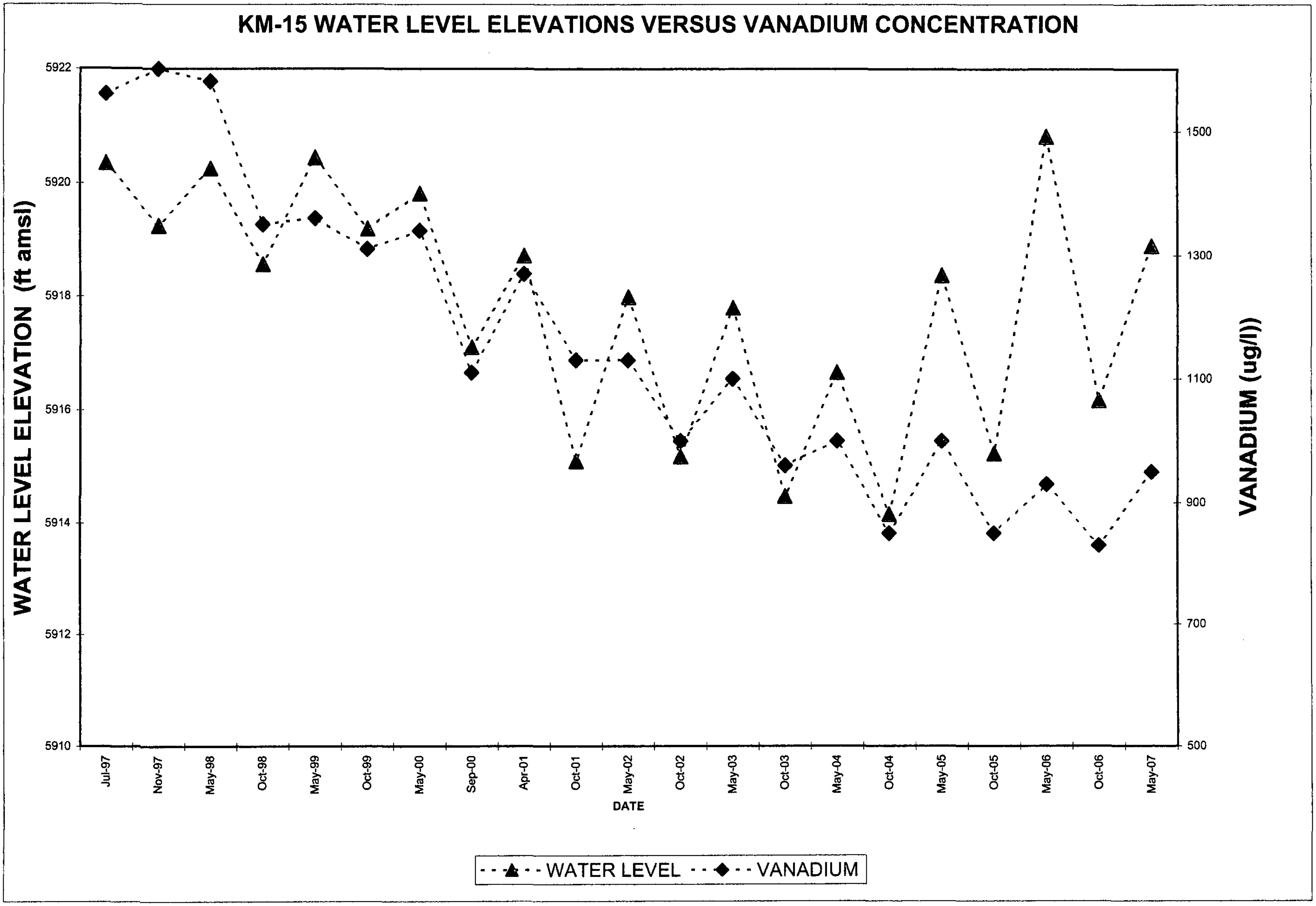

KM-15 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
VANADIUM (ug/l)
5922
5920
5918
5916
5914
5912
5910
1500
1300
1100
900
700
500
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
VANADIUM

FIGURE C-20

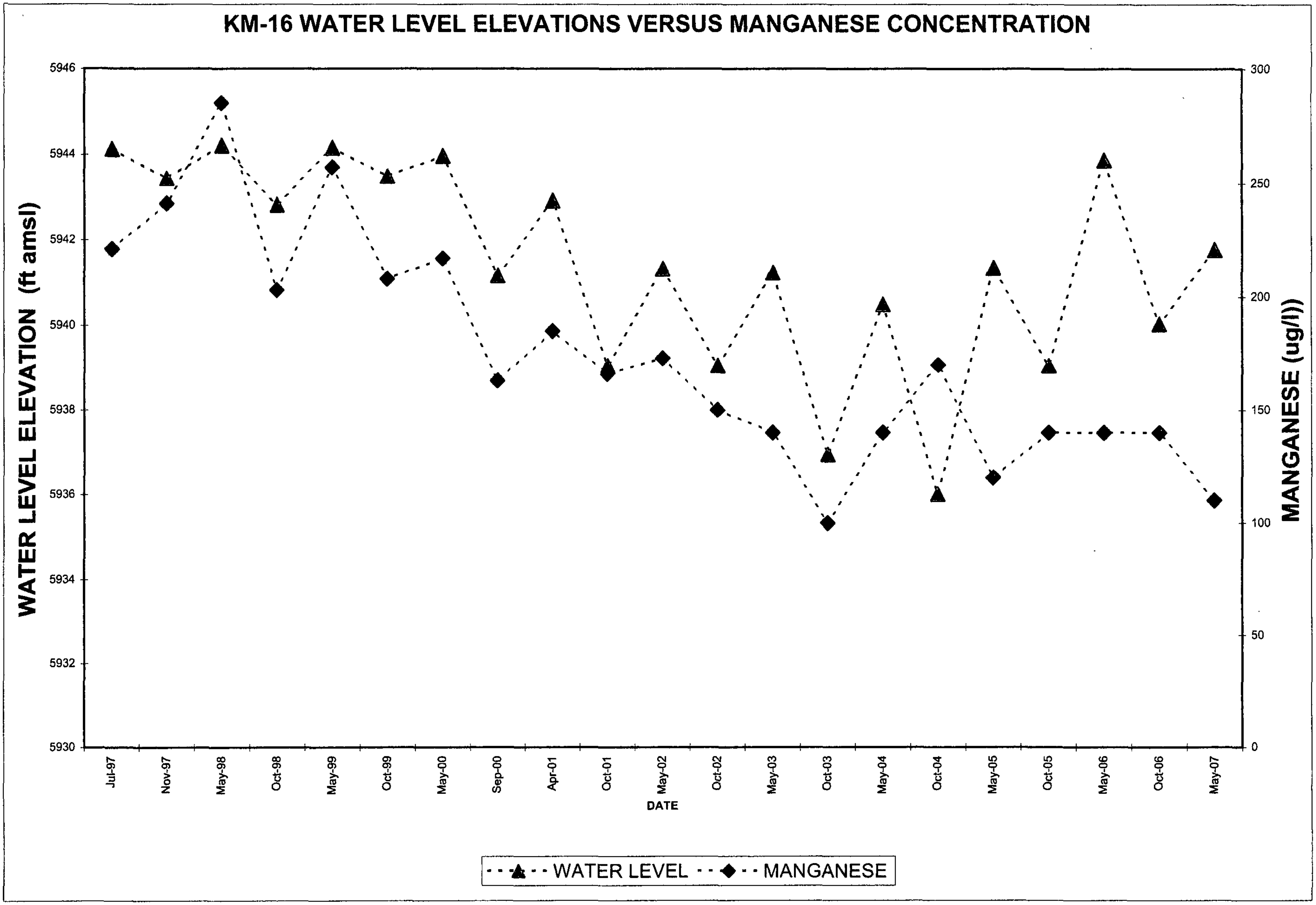

KM-16 WATER LEVEL ELEVATIONS VERSUS MANGANESE CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MANGANESE (ug/l))
5946
5944
5942
5940
5938
5936
5934
5932
5930
300
250
200
150
100
50
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MANGANESE

FIGURE C-21

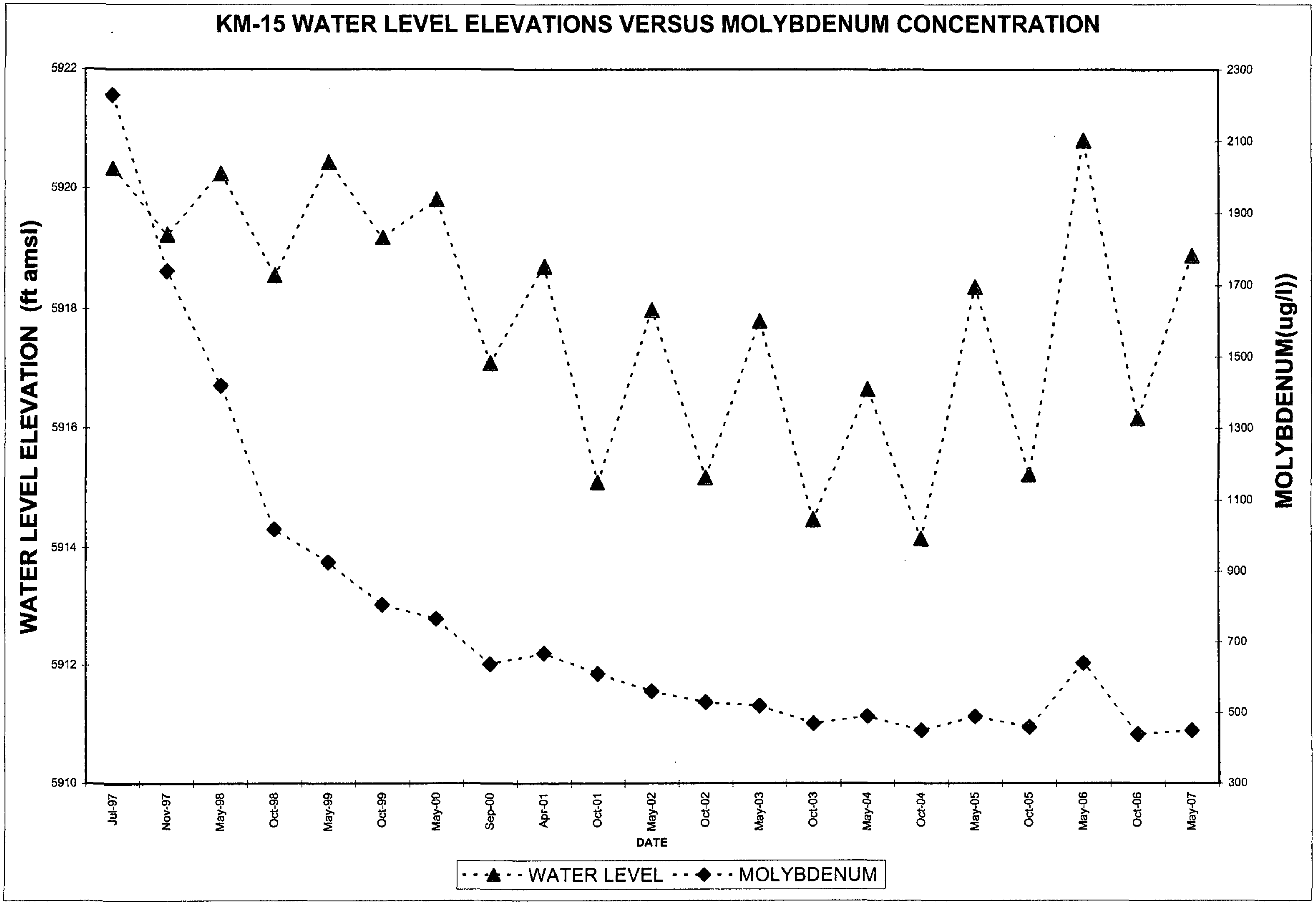

KM-15 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MOLYBDENUM(ug/l))
5922
5920
5918
5916
5914
5912
5910
2300
2100
1900
1700
1500
1300
1100
900
700
500
300
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MOLYBDENUM

FIGURE C-22

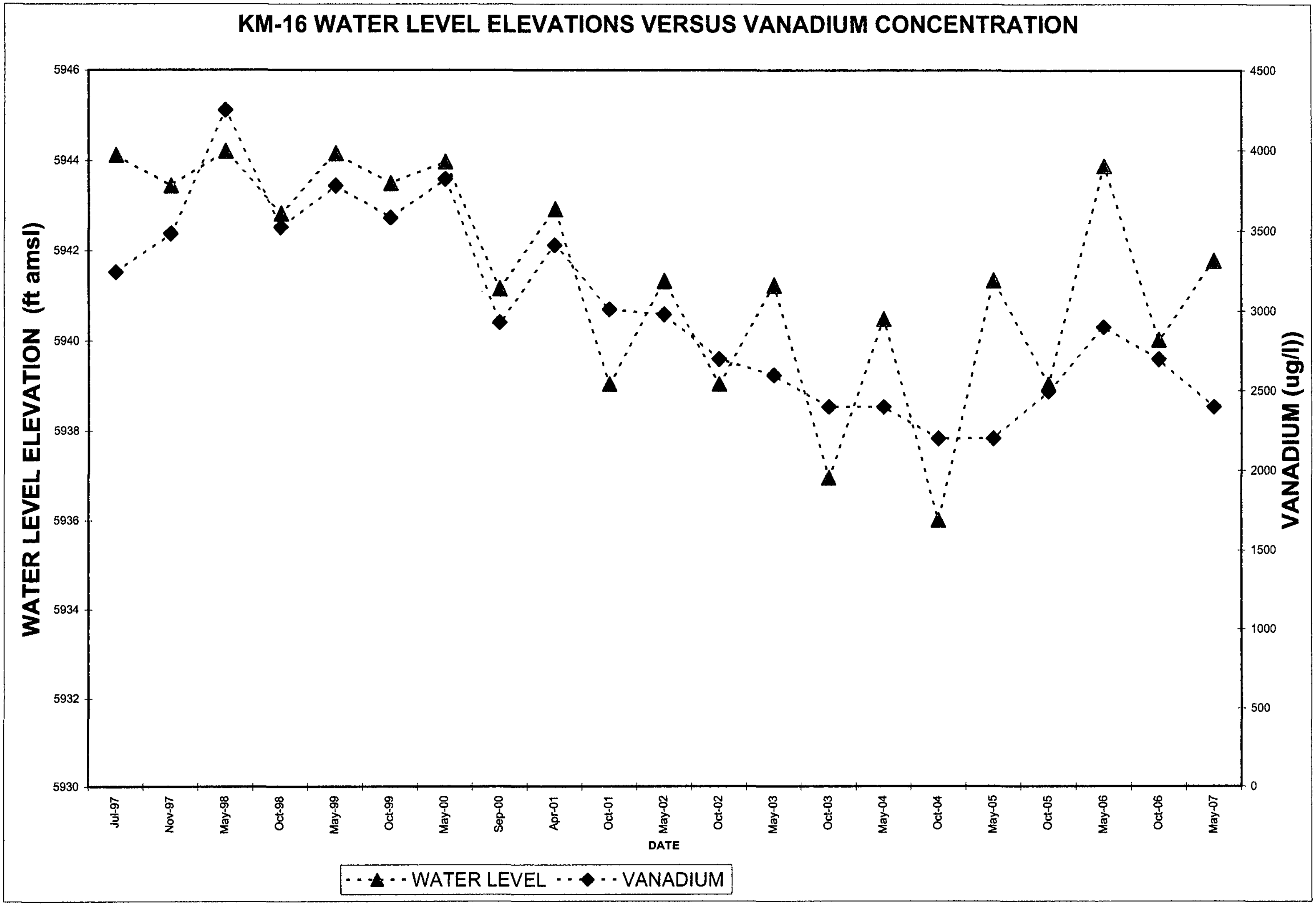

KM-16 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
VANADIUM (ug/l))
5946
5944
5942
5940
5938
5936
5934
5932
5930
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
VANADIUM

FIGURE C-23

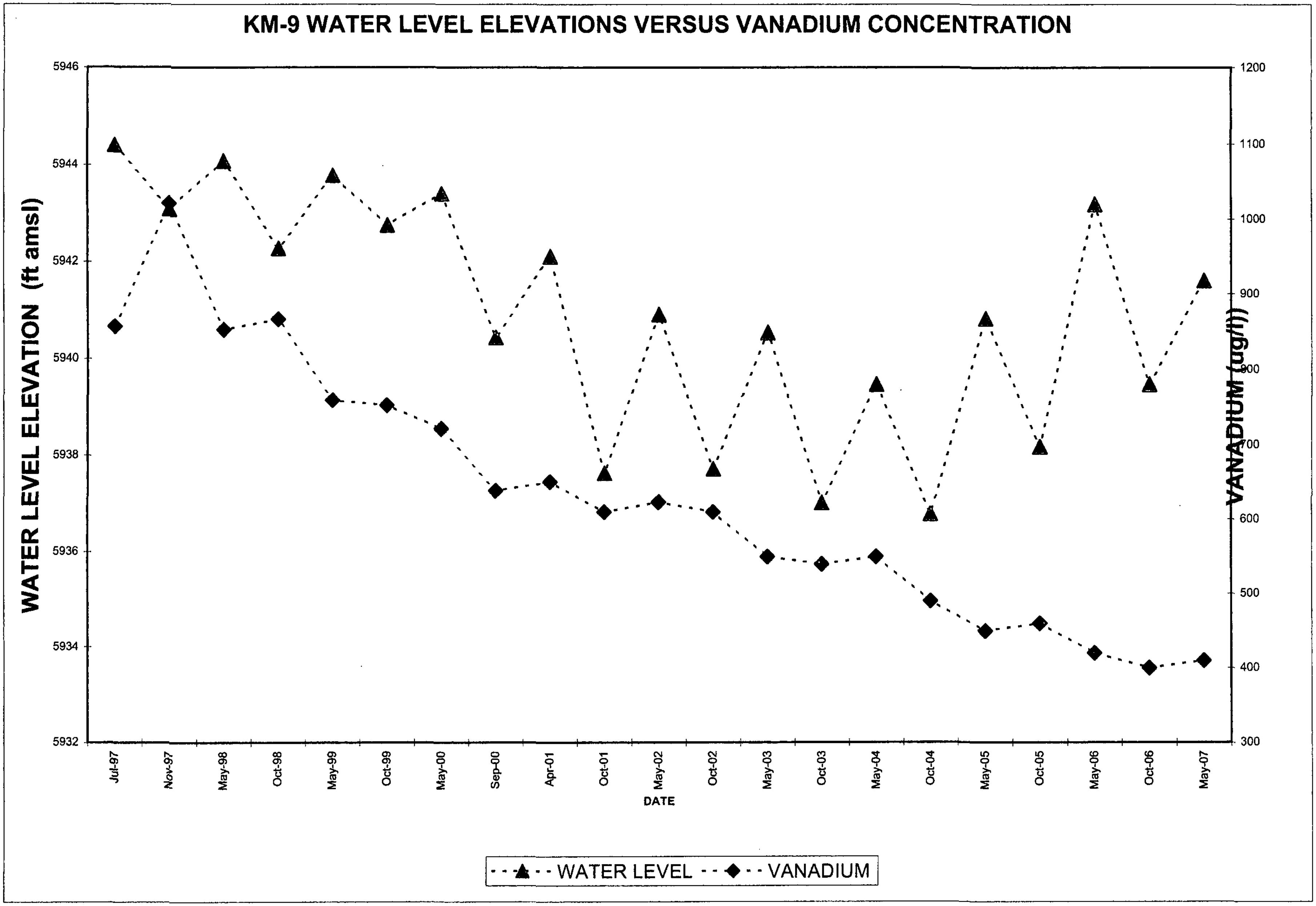

KM-9 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
VANADIUM (ug/l))
5946
5944
5942
5940
5938
5936
5934
5932
1200
1100
1000
900
800
700
600
500
400
300
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
VANADIUM

FIGURE C-24

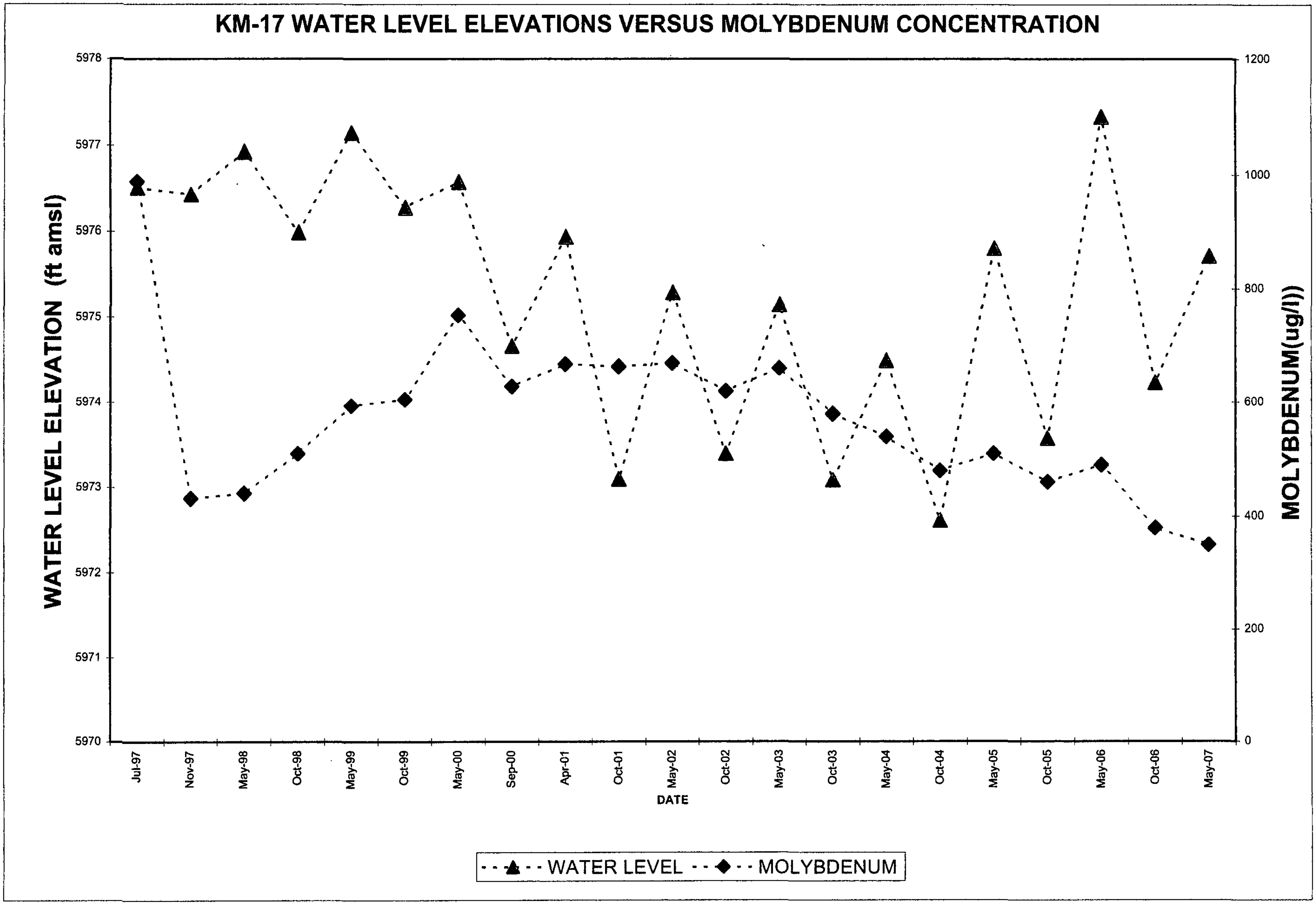

KM-17 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MOLYBDENUM(ug/l))
5978
5977
5976
5975
5974
5973
5972
5971
5970
1200
1000
800
600
400
200
0
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MOLYBDENUM

FIGURE C-25

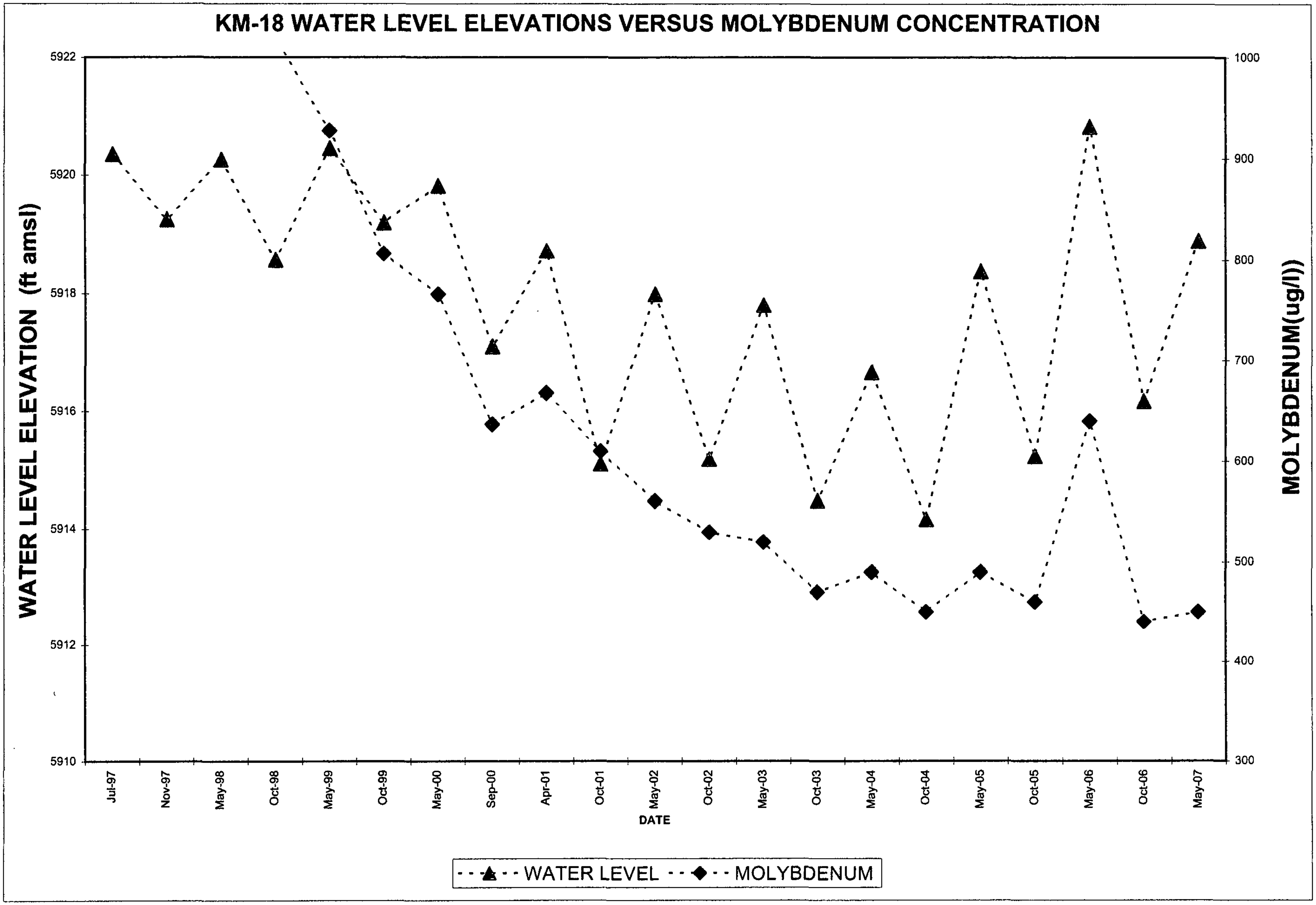

KM-18 WATER LEVEL ELEVATIONS VERSUS MOLYBDENUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
MOLYBDENUM(ug/l))
5922
5920
5918
5916
5914
5912
5910
1000
900
800
700
600
500
400
300
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
MOLYBDENUM

FIGURE C-26

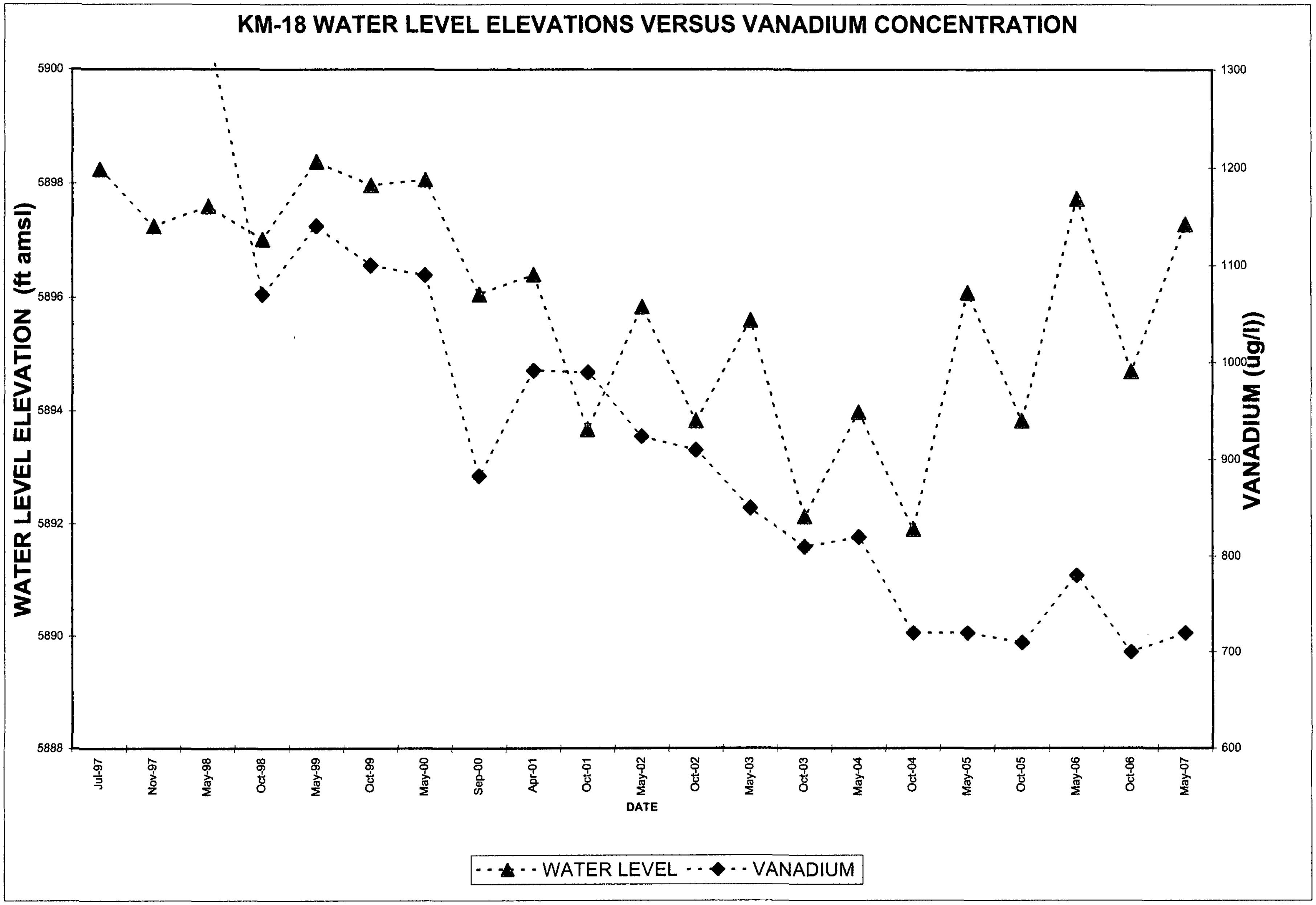
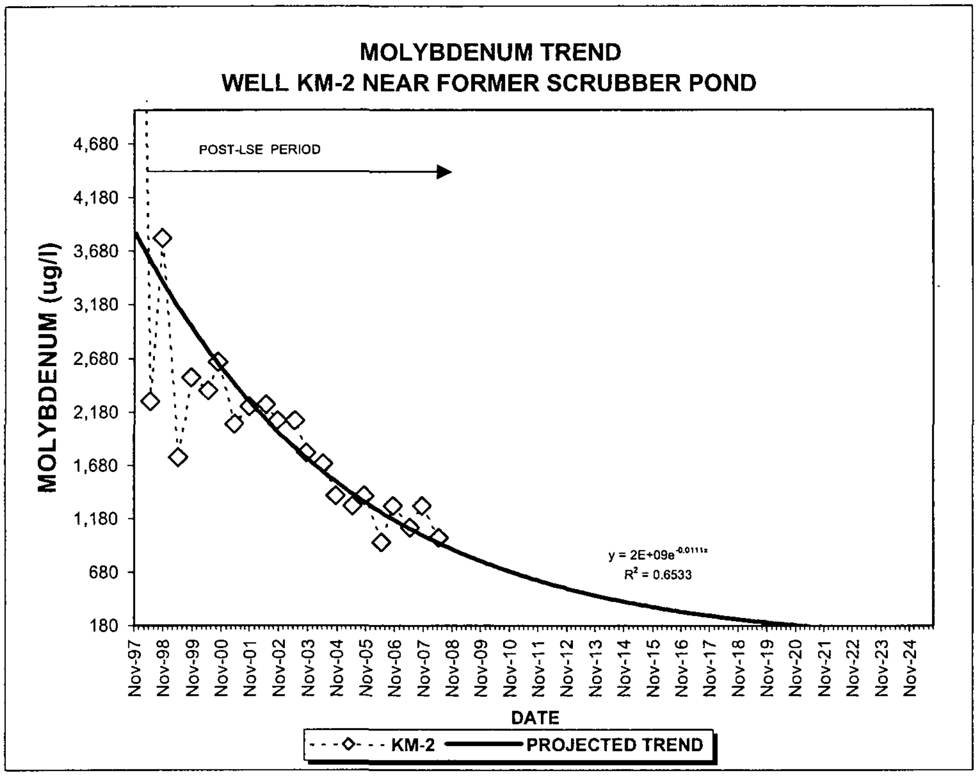

KM-18 WATER LEVEL ELEVATIONS VERSUS VANADIUM CONCENTRATION
WATER LEVEL ELEVATION (ft amsl)
VANADIUM (ug/l))
5900
5898
5896
5894
5892
5890
5888
1300
1200
1100
1000
900
800
700
600
Jul-97
Nov-97
May-98
Oct-98
May-99
Oct-99
May-00
Sep-00
Apr-01
Oct-01
May-02
Oct-02
May-03
Oct-03
May-04
Oct-04
May-05
Oct-05
May-06
Oct-06
May-07
DATE
WATER LEVEL
VANADIUM

FIGURE C-27


MOLYBDENUM TREND
WELL KM-2 NEAR FORMER SCRUBBER POND
POST-LSE PERIOD
MOLYBDENUM (ug/l)
4,680
4,180
3,680
3,180
2,680
2,180
1,680
1,180
680
180
y = 2E+09e-0.0111x
R² = 0.6533
Nov-97 Nov-98 Nov-99 Nov-00 Nov-01 Nov-02 Nov-03 Nov-04 Nov-05 Nov-06 Nov-07 Nov-08 Nov-09 Nov-10 Nov-11 Nov-12 Nov-13 Nov-14 Nov-15 Nov-16 Nov-17 Nov-18 Nov-19 Nov-20 Nov-21 Nov-22 Nov-23 Nov-24
DATE
KM-2
PROJECTED TREND

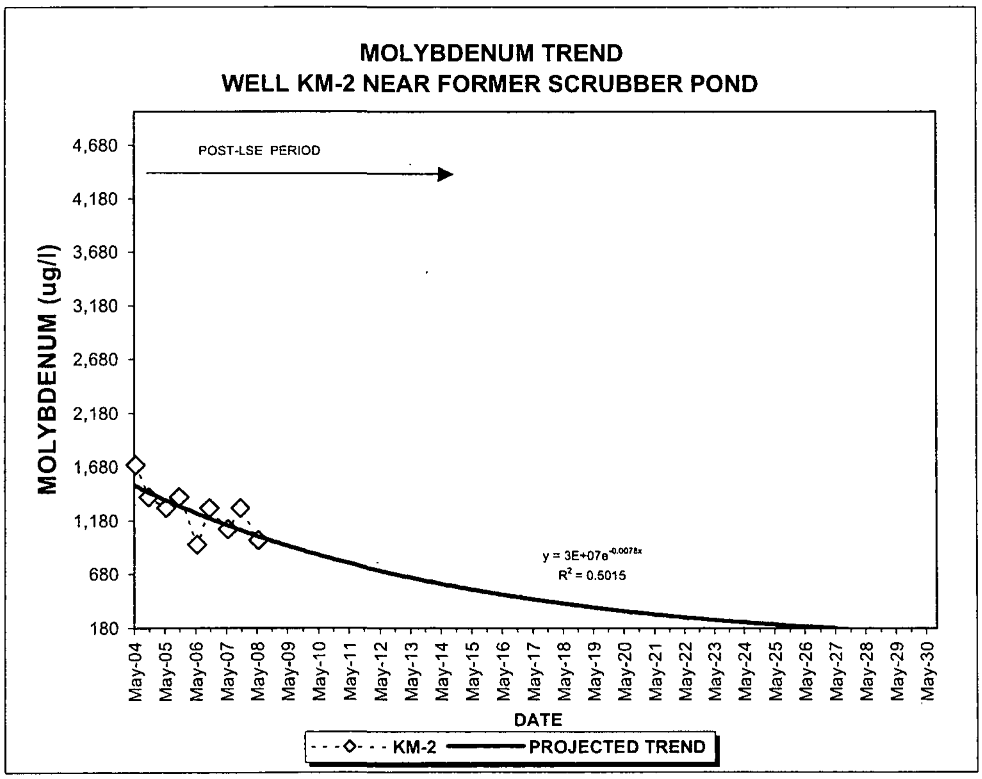
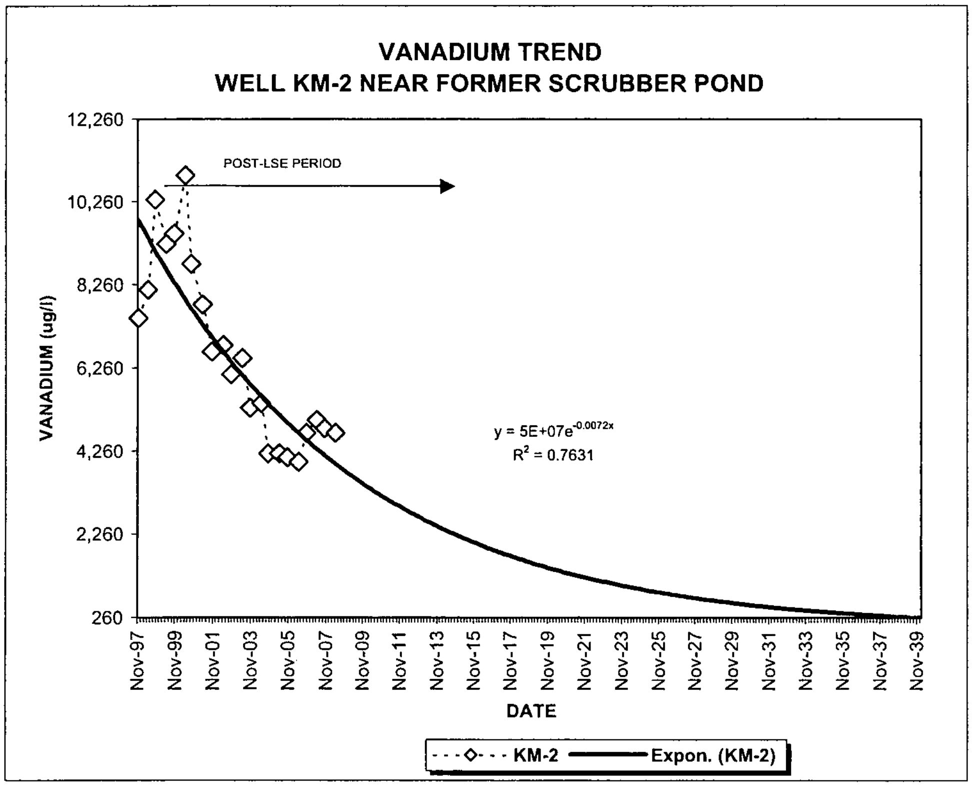

MOLYBDENUM TREND
WELL KM-2 NEAR FORMER SCRUBBER POND
POST-LSE PERIOD
MOLYBDENUM (ug/l)
4,680
4,180
3,680
3,180
2,680
2,180
1,680
1,180
680
180
y = 3E+07e-0.0078x
R² = 0.5015
May-04 May-05 May-06 May-07 May-08 May-09 May-10 May-11 May-12 May-13 May-14 May-15 May-16 May-17 May-18 May-19 May-20 May-21 May-22 May-23 May-24 May-25 May-26 May-27 May-28 May-29 May-30
DATE
KM-2
PROJECTED TREND

FIGURE C-28


VANADIUM TREND
WELL KM-2 NEAR FORMER SCRUBBER POND
VANADIUM (ug/l)
12,260
10,260
8,260
6,260
4,260
2,260
260
POST-LSE PERIOD
y = 5E+07e^-0.0072x
R² = 0.7631
Nov-97 Nov-99 Nov-01 Nov-03 Nov-05 Nov-07 Nov-09 Nov-11 Nov-13 Nov-15 Nov-17 Nov-19 Nov-21 Nov-23 Nov-25 Nov-27 Nov-29 Nov-31 Nov-33 Nov-35 Nov-37 Nov-39
DATE
KM-2
Expon. (KM-2)

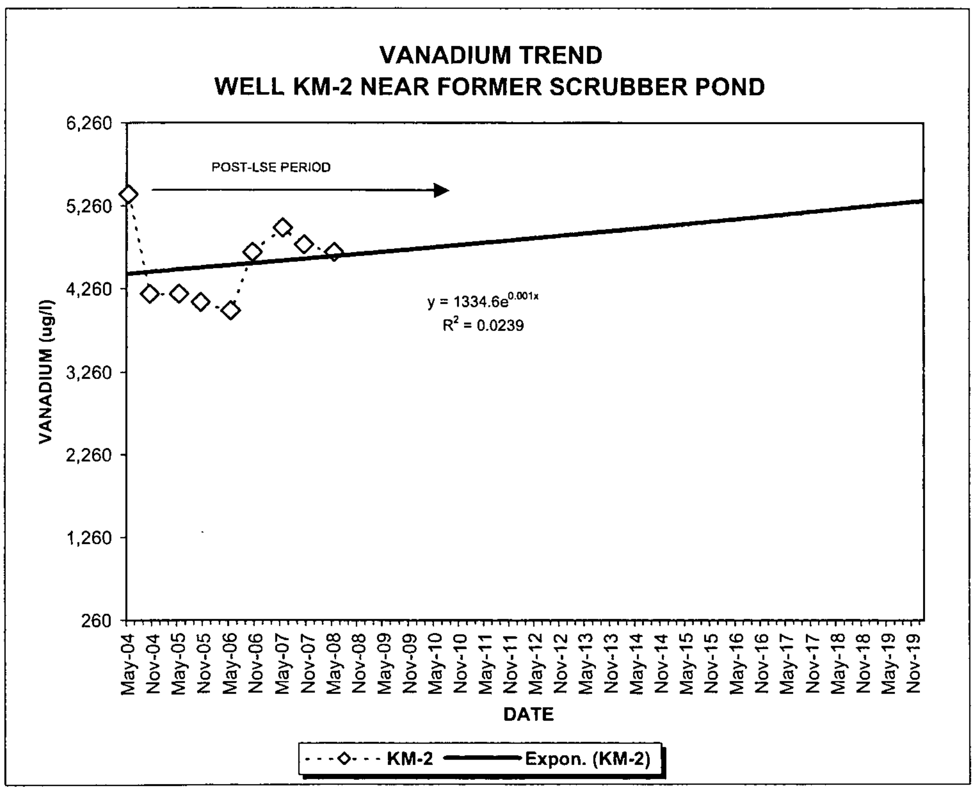
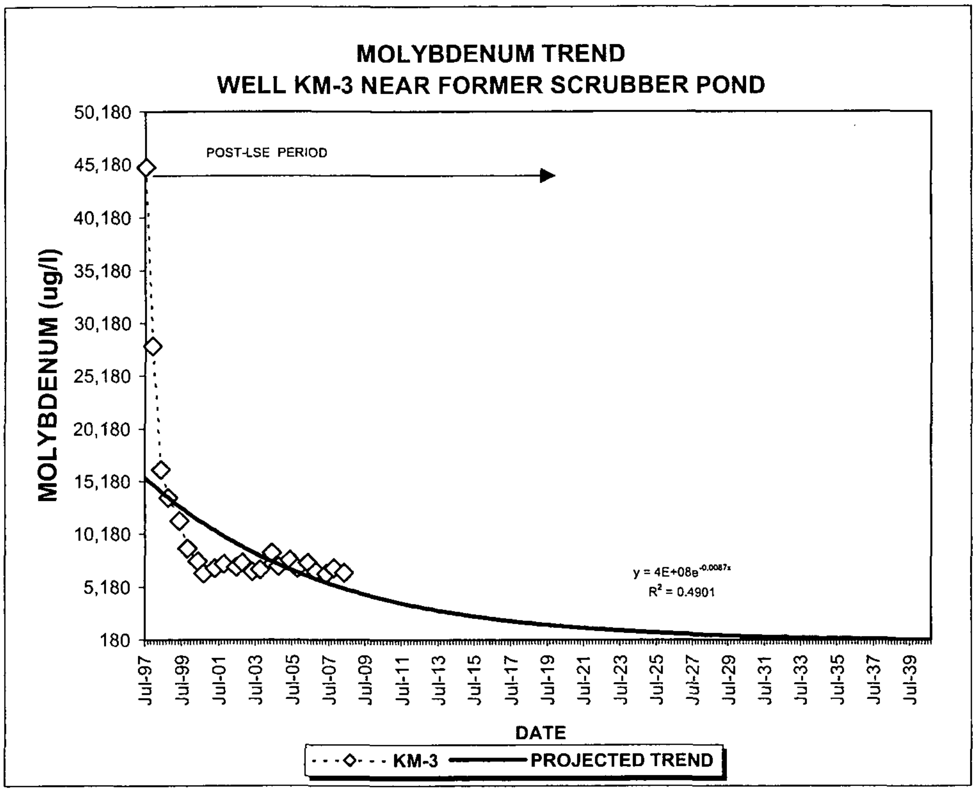

VANADIUM TREND
WELL KM-2 NEAR FORMER SCRUBBER POND
VANADIUM (ug/l)
6,260
5,260
4,260
3,260
2,260
1,260
260
POST-LSE PERIOD
y = 1334.6e^0.001x
R² = 0.0239
May-04 Nov-04 May-05 Nov-05 May-06 Nov-06 May-07 Nov-07 May-08 Nov-08 May-09 Nov-09 May-10 Nov-10 May-11 Nov-11 May-12 Nov-12 May-13 Nov-13 May-14 Nov-14 May-15 Nov-15 May-16 Nov-16 May-17 Nov-17 May-18 Nov-18 May-19 Nov-19
DATE
KM-2
Expon. (KM-2)

FIGURE C-29


MOLYBDENUM TREND
WELL KM-3 NEAR FORMER SCRUBBER POND
MOLYBDENUM (ug/l)
POST-LSE PERIOD
y = 4E+08e^-0.0087x
R² = 0.4901
DATE
KM-3
PROJECTED TREND

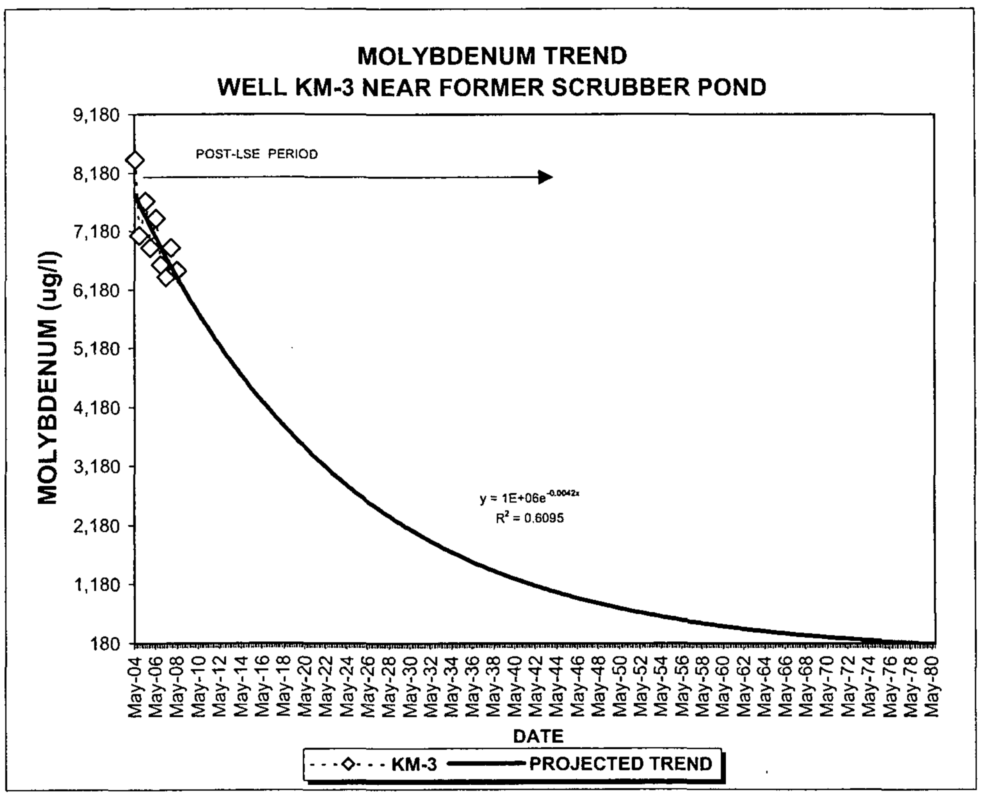
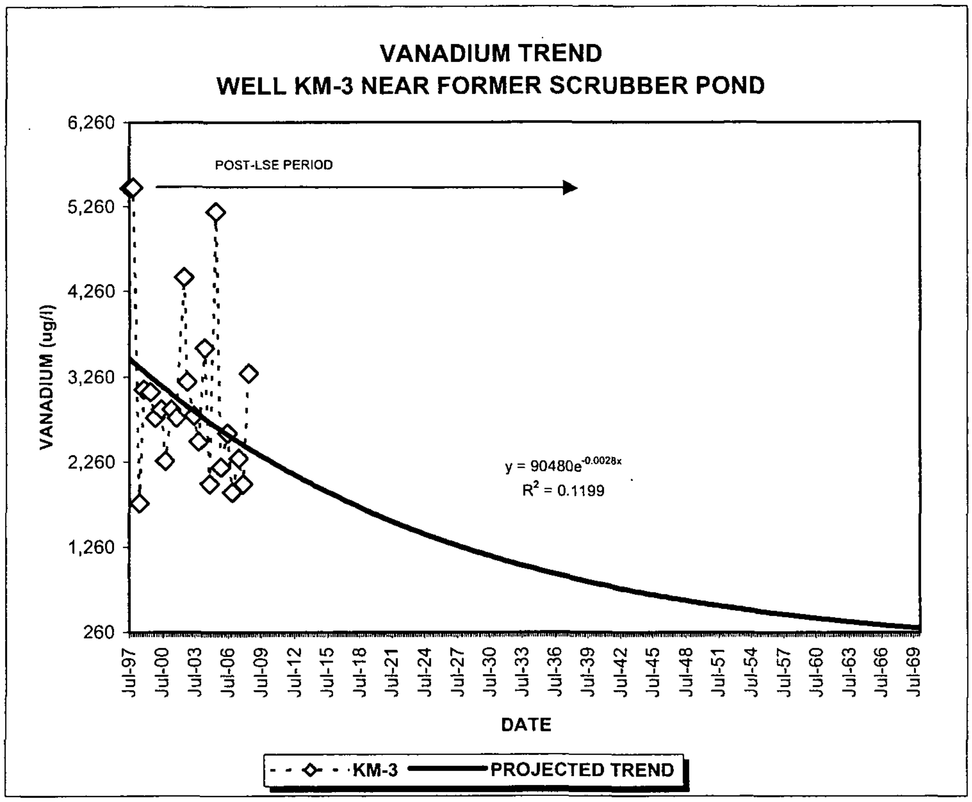

MOLYBDENUM TREND
WELL KM-3 NEAR FORMER SCRUBBER POND
MOLYBDENUM (ug/l)
POST-LSE PERIOD
y = 1E+06e^-0.0042x
R² = 0.6095
DATE
KM-3
PROJECTED TREND

FIGURE C-30


VANADIUM TREND
WELL KM-3 NEAR FORMER SCRUBBER POND
VANADIUM (ug/l)
6,260
5,260
4,260
3,260
2,260
1,260
260
POST-LSE PERIOD
y = 90480e^-0.0028x
R^2 = 0.1199
Jul-97
Jul-00
Jul-03
Jul-06
Jul-09
Jul-12
Jul-15
Jul-18
Jul-21
Jul-24
Jul-27
Jul-30
Jul-33
Jul-36
Jul-39
Jul-42
Jul-45
Jul-48
Jul-51
Jul-54
Jul-57
Jul-60
Jul-63
Jul-66
Jul-69
DATE
KM-3
PROJECTED TREND

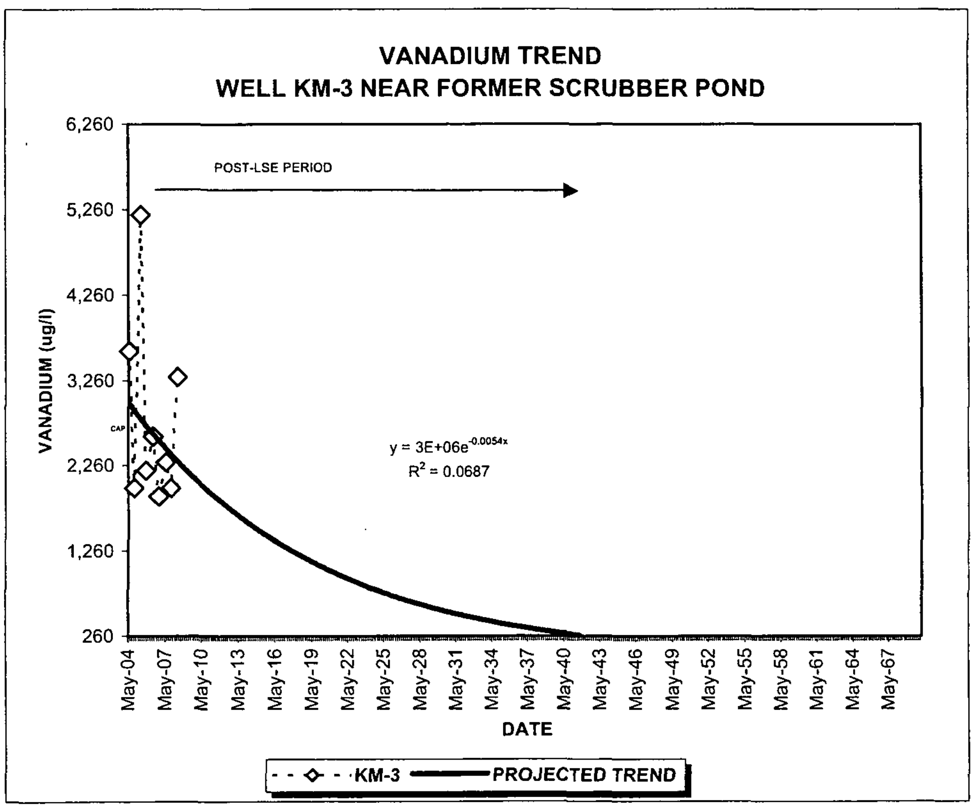
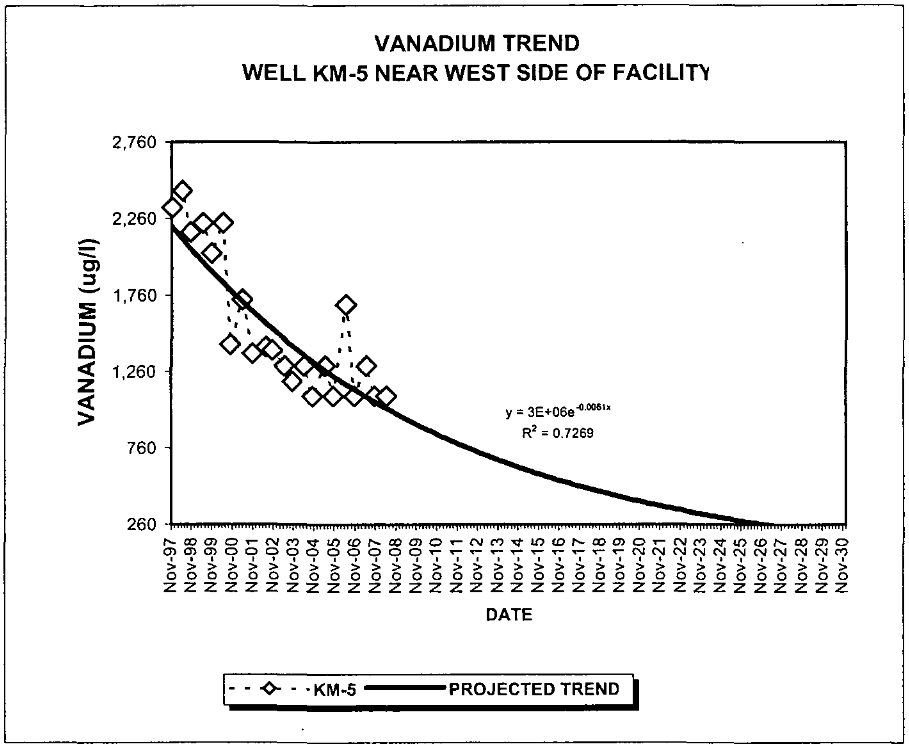
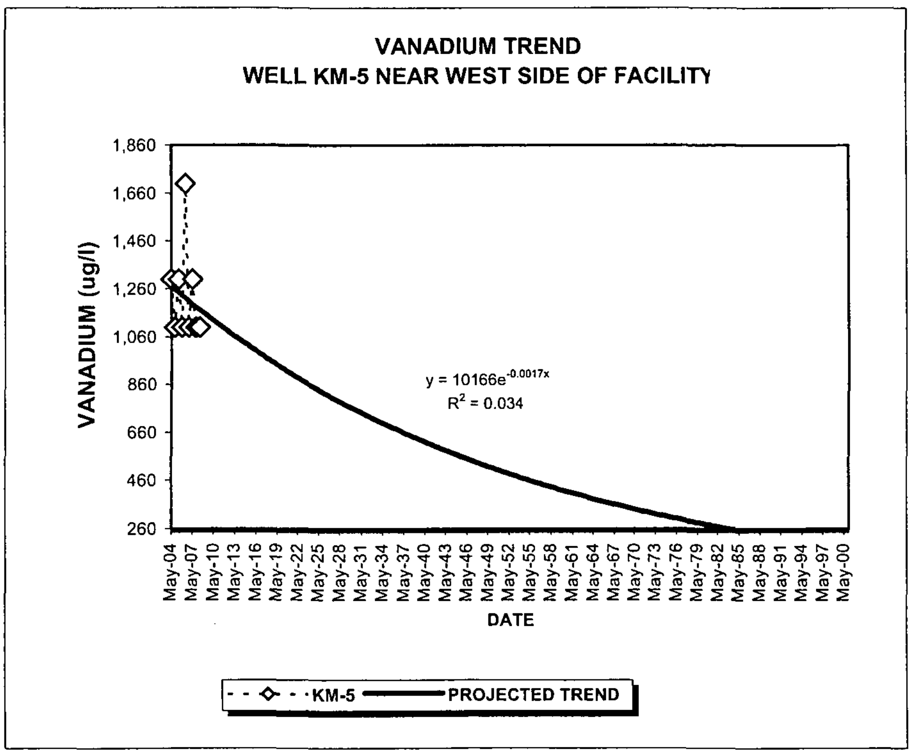

VANADIUM TREND
WELL KM-3 NEAR FORMER SCRUBBER POND
VANADIUM (ug/l)
6,260
5,260
4,260
3,260
2,260
1,260
260
POST-LSE PERIOD
CAP
y = 3E+06e^-0.0054x
R^2 = 0.0687
May-04
May-07
May-10
May-13
May-16
May-19
May-22
May-25
May-28
May-31
May-34
May-37
May-40
May-43
May-46
May-49
May-52
May-55
May-58
May-61
May-64
May-67
DATE
KM-3
PROJECTED TREND

FIGURE C-31

COC CONCENTRATION TRENDS WITH TIME AND PROJECTED TRENDS

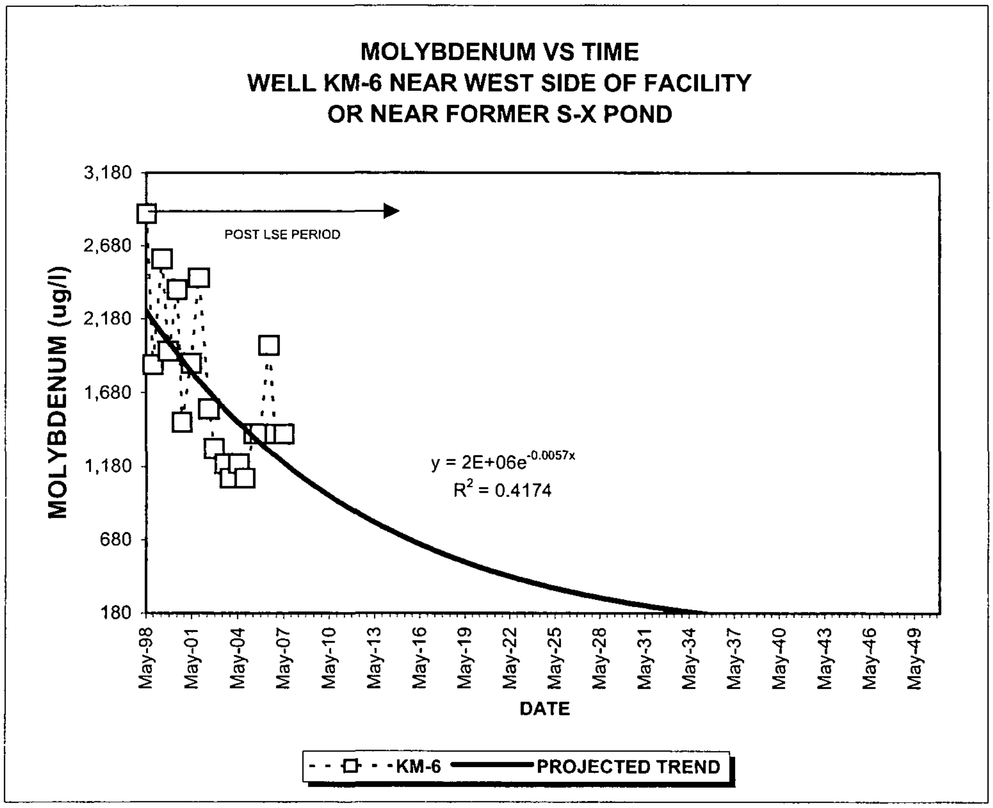




RBC FOR VANADIUM IS 260 UG/L
KM-5 IS A POC WELL
PROJECTED TRENDS BASED ON OBSERVATIONS FOLLOWING LSE

FIGURE C-32

COC CONCENTRATIONS AND PROJECTED TRENDS VERSUS TIME



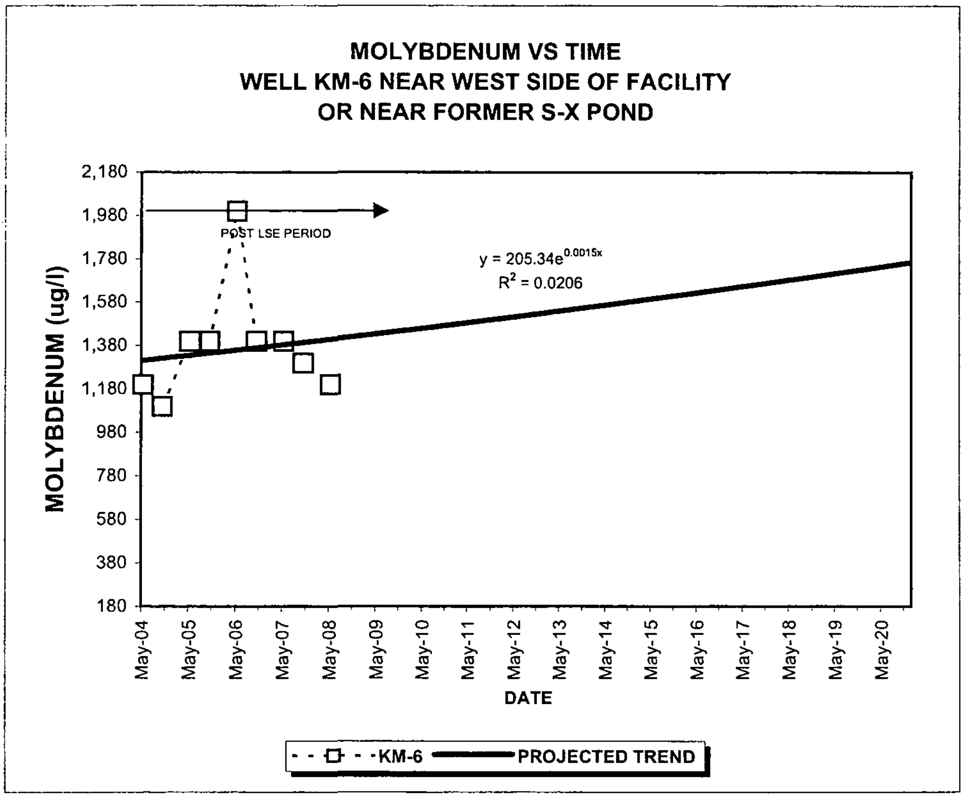
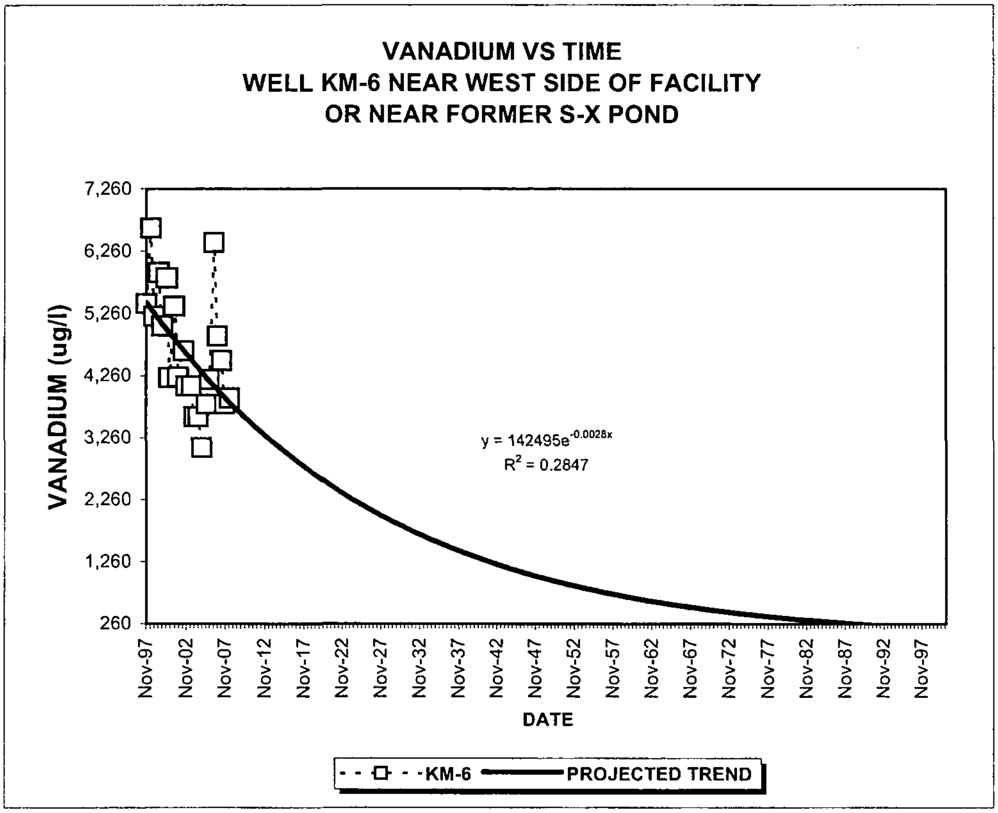


FIGURE C-33

RBC FOR MOLYBDENUM IS 180 UG/L

COC CONCENTRATIONS AND PROJECTED TRENDS VERSUS TIME



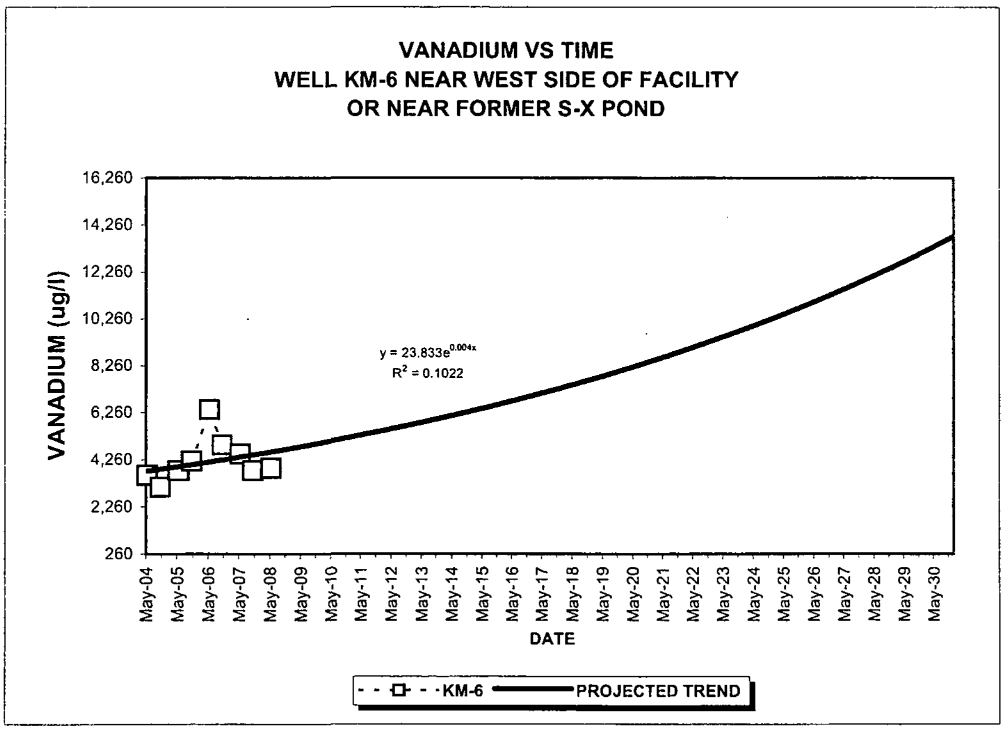
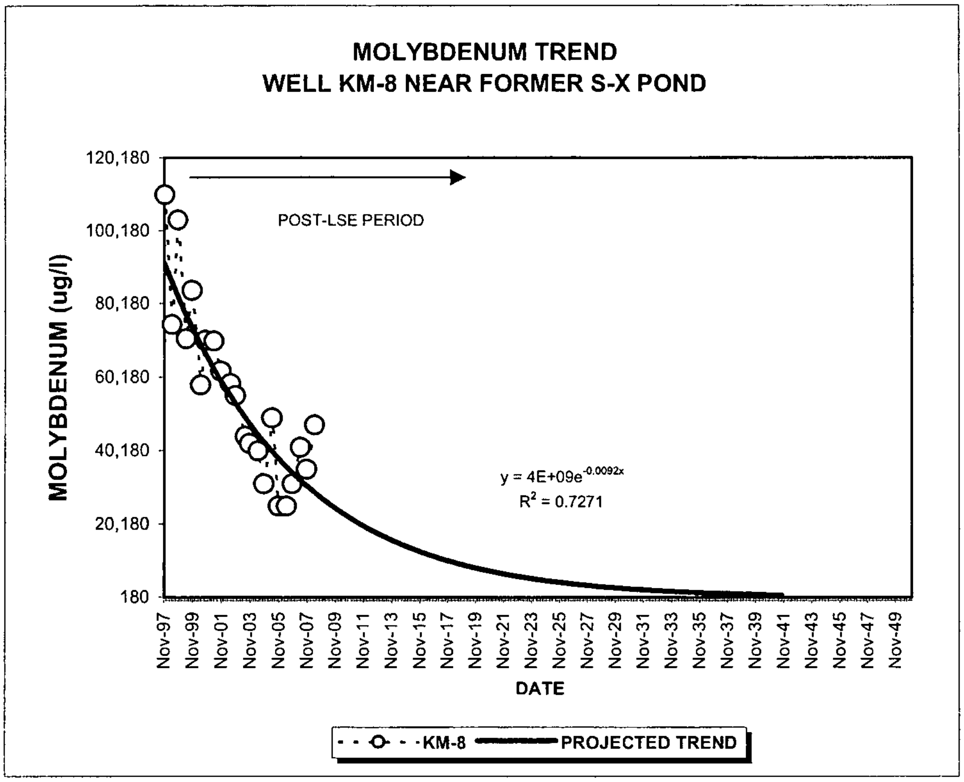


FIGURE C-34

RBC FOR VANADIUM IS 260 UG/L

COC CONCENTRATION TRENDS WITH TIME AND PROJECTED TRENDS



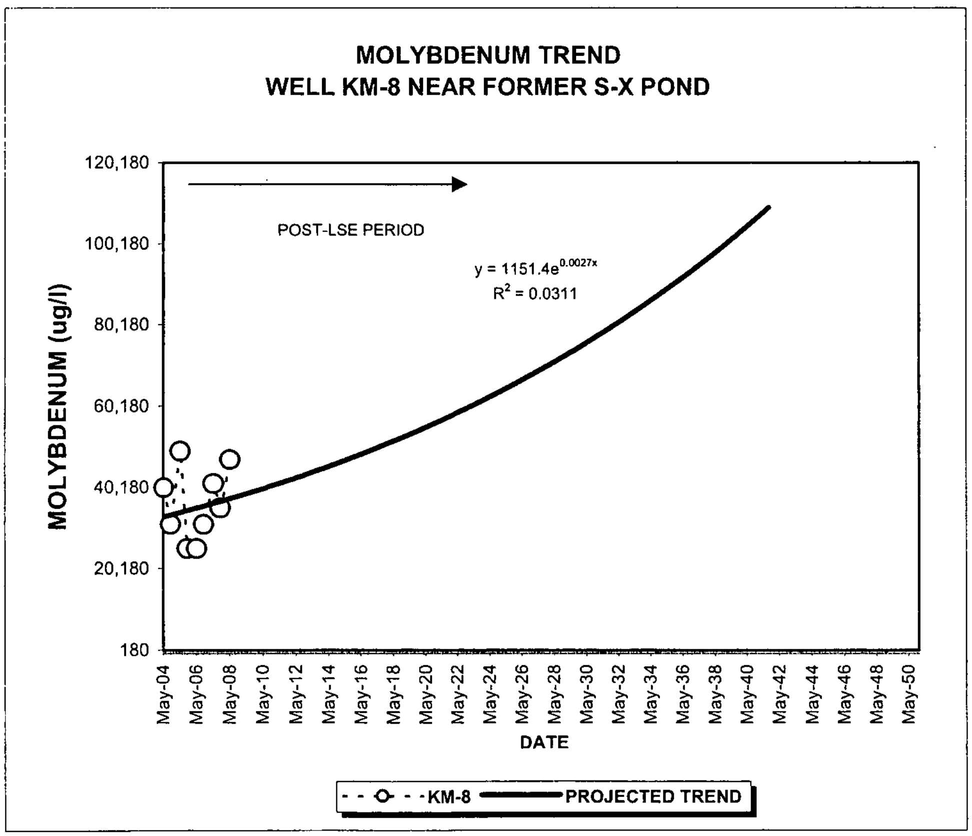
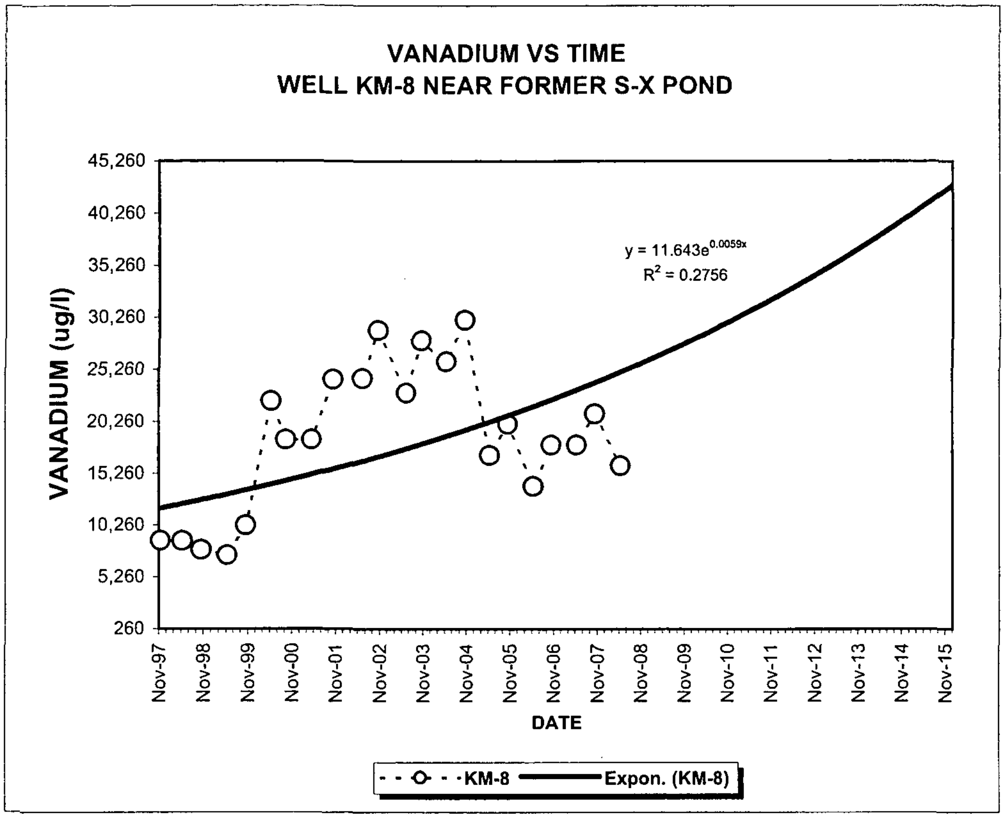
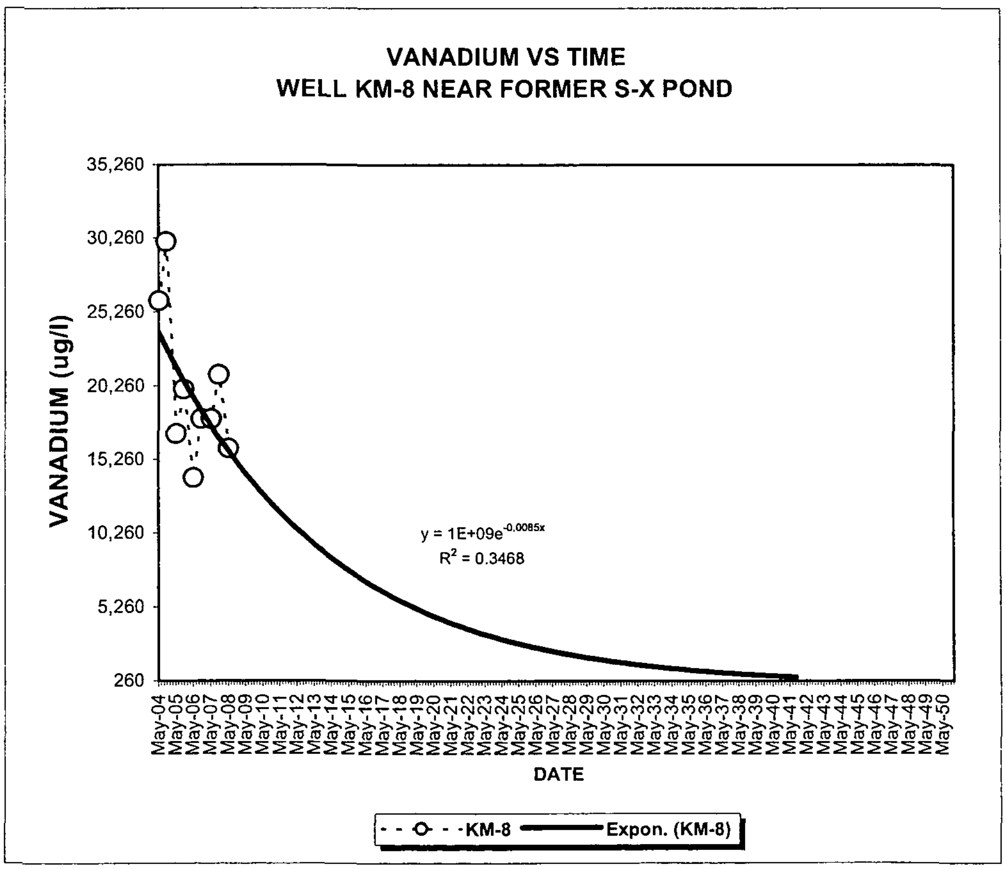


FIGURE C-35

RBC FOR MOLYBDENUM IS 180 UG/L
KM-8 IS A POC WELL
PROJECTED TRENDS BASED ON OBSERVATIONS FOLLOWING LSE AND RECLAMATION

COC CONCENTRATION TRENDS WITH TIME AND PROJECTED TRENDS

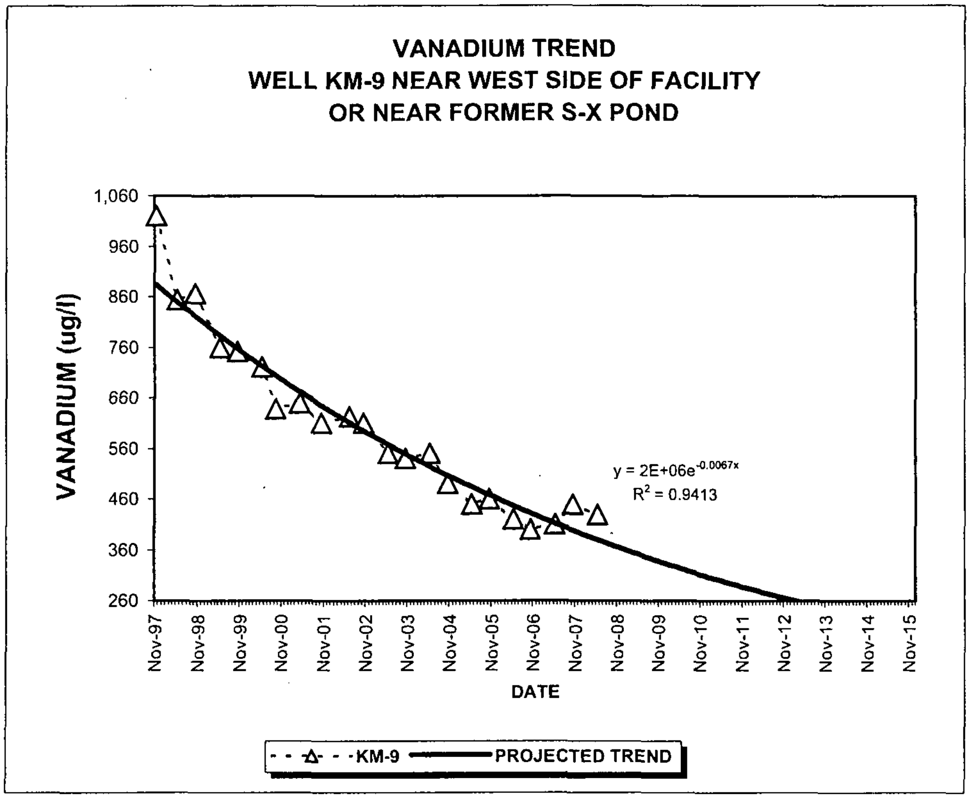


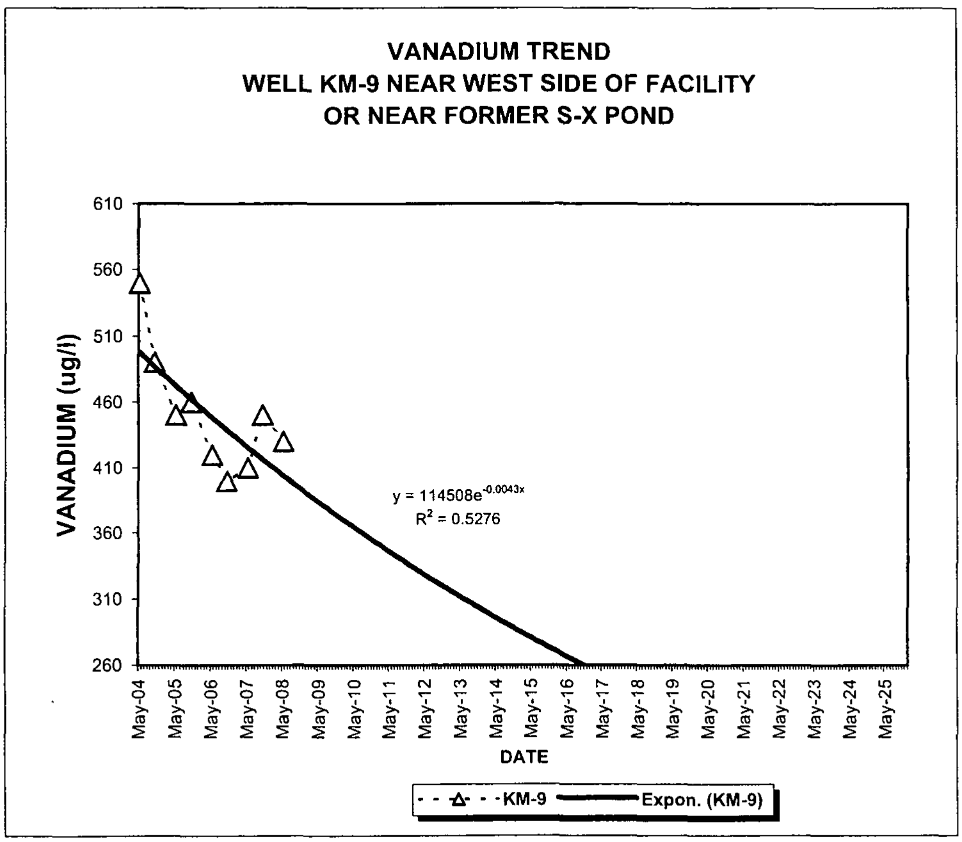


RBC FOR VANADIUM IS 260 UG/L
KM-8 IS A POC WELL
PROJECTED TRENDS BASED ON OBSERVATIONS FOLLOWING LSE AND RECLAMATION

FIGURE C-36

COC CONCENTRATION TRENDS WITH TIME AND PROJECTED TRENDS

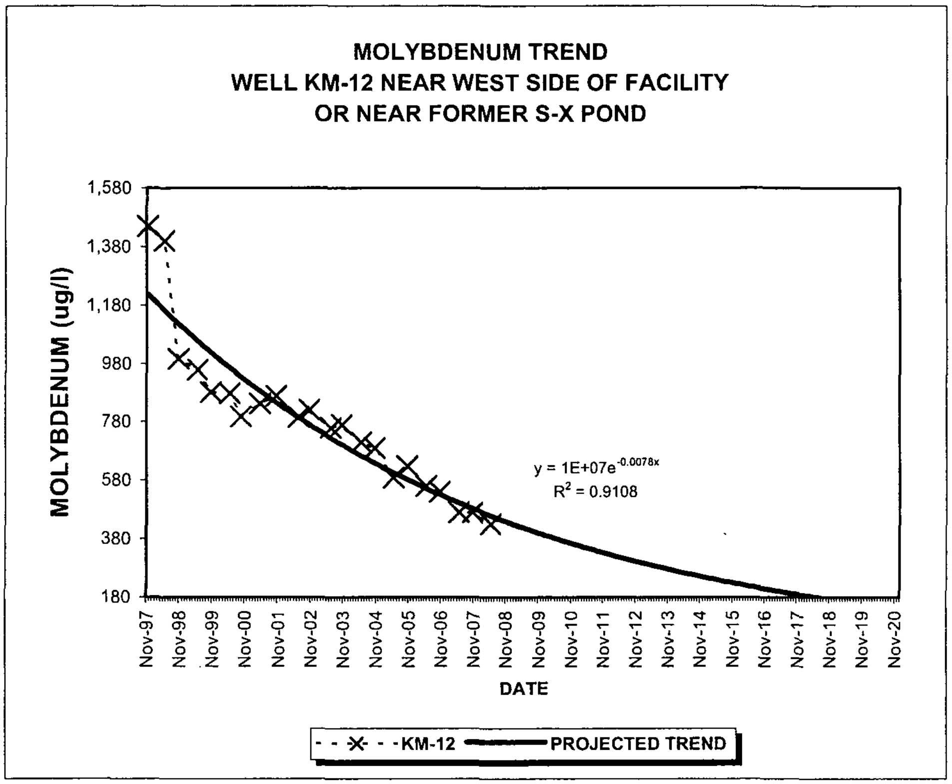


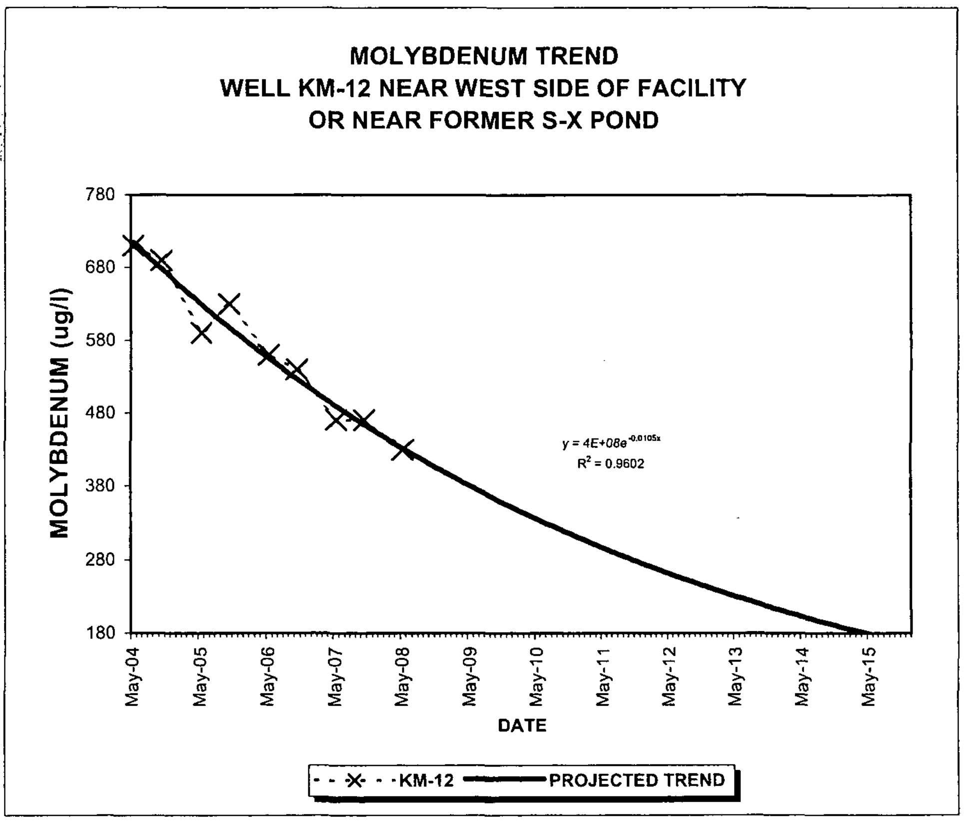


RBC FOR VANADIUM IS 260 UG/L
KM-9 IS A POC WELL
PROJECTED TRENDS BASED ON OBSERVATIONS FOLLOWING REROUTING OF S-X STREAM

FIGURE C-37

COC CONCENTRATION TRENDS WITH TIME AND PROJECTED TRENDS

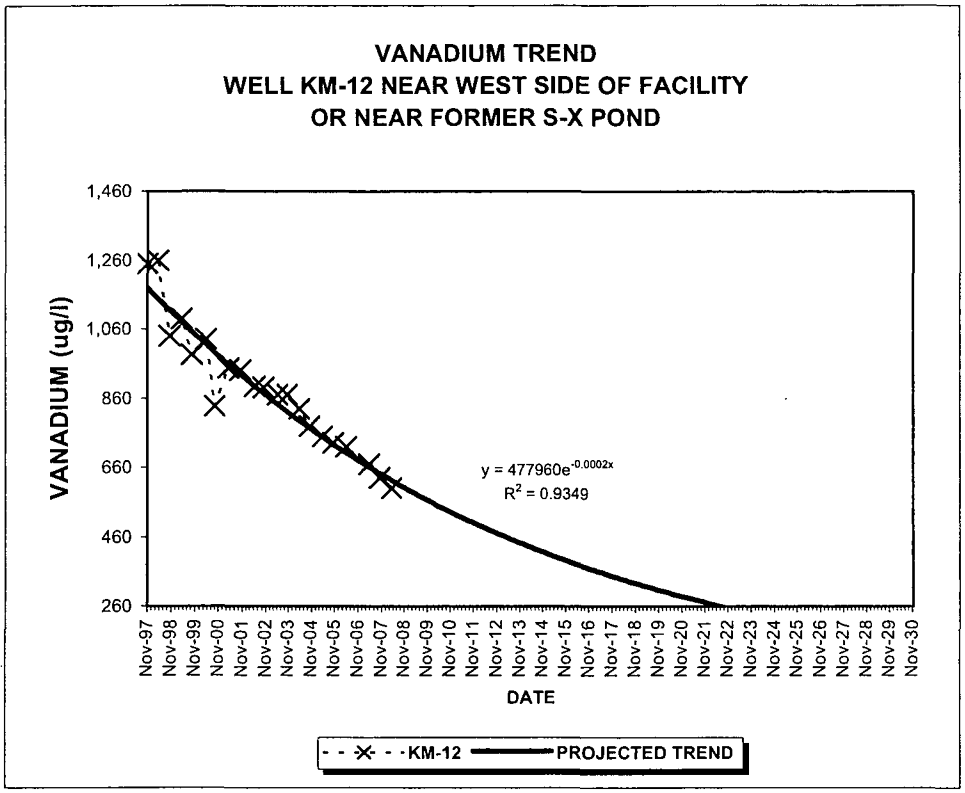


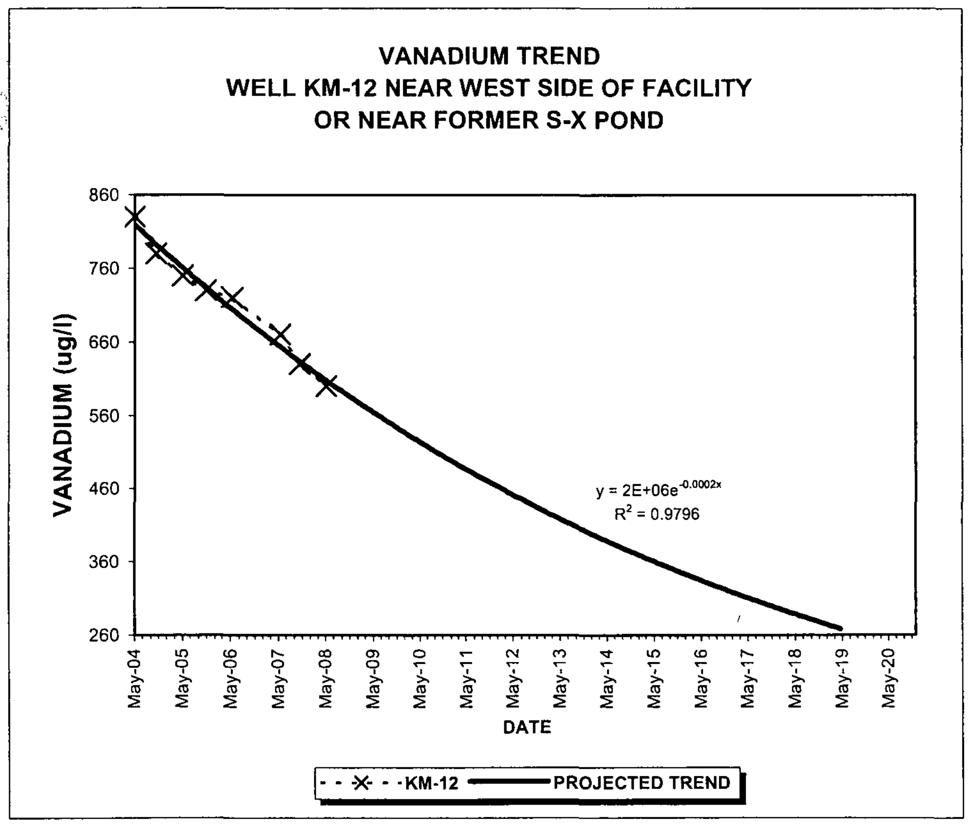


RBC FOR MOLYBDENUM IS 180 UG/L
KM-12 IS A POC WELL
PROJECTED TRENDS BASED ON OBSERVATIONS FOLLOWING REROUTING OF THE S-X STREAM

FIGURE C-38

COC CONCENTRATION TRENDS WITH TIME AND PROJECTED TRENDS

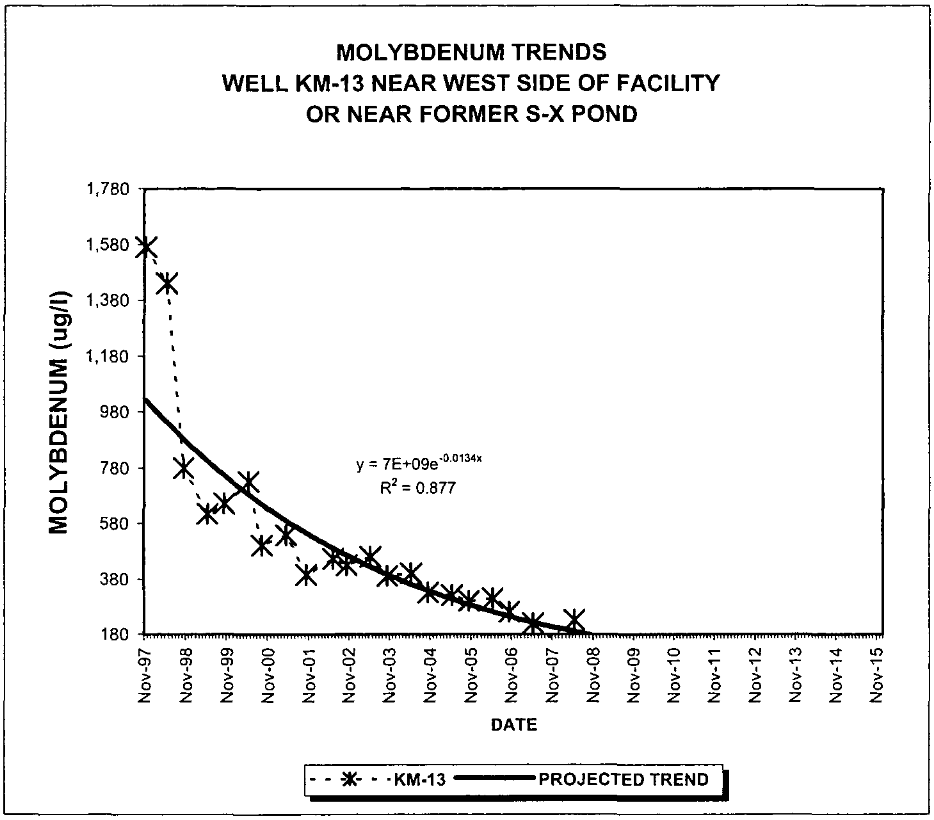


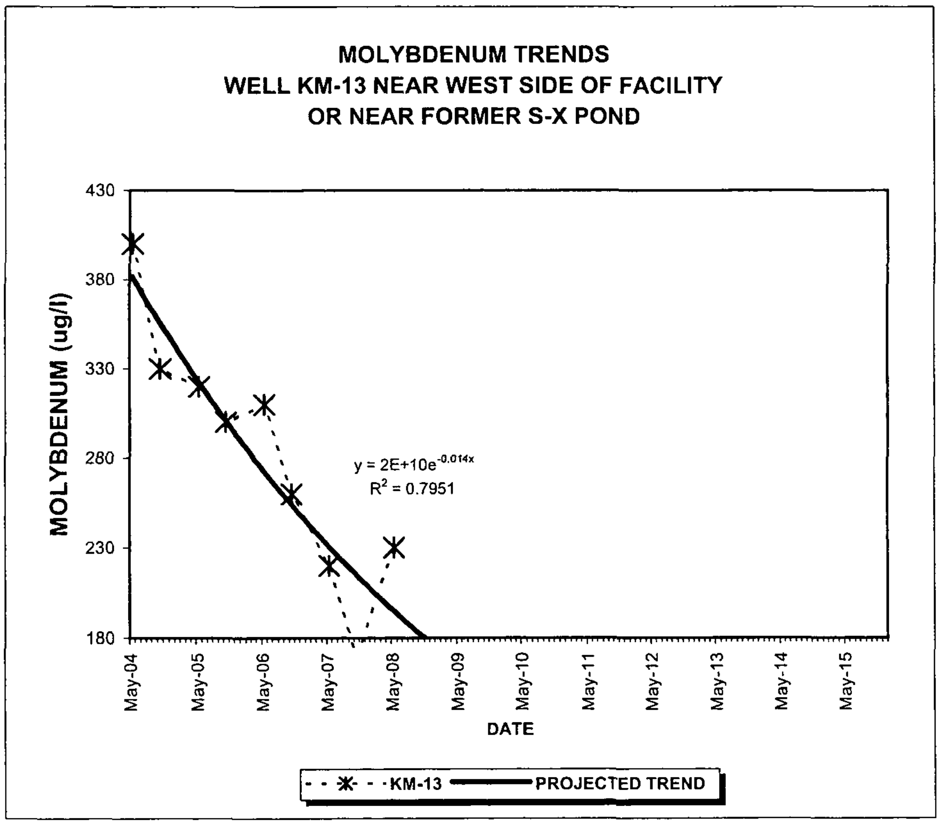


RBC FOR VANADIUM IS 260 UG/L
KM-12 IS A POC WELL
PROJECTED TRENDS BASED ON OBSERVATIONS FOLLOWING REROUTING OF THE S-X STREAM

FIGURE C-39

COC CONCENTRATION TRENDS WITH TIME AND PROJECTED TRENDS

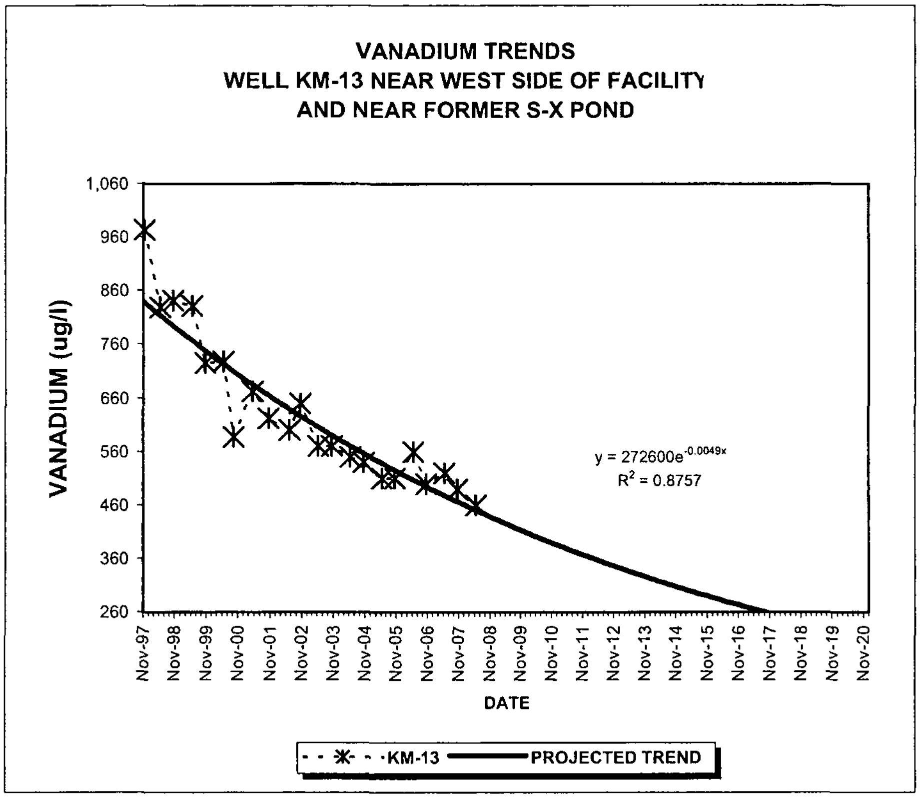




RBC FOR MOLYBDENUM IS 180 UG/L
KM-13 IS A POC WELL
PROJECTED TRENDS BASED ON OBSERVATIONS FOLLOWING REROUTING OF THE S-X STREAM

FIGURE C-40

COC CONCENTRATION TRENDS WITH TIME AND PROJECTED TRENDS



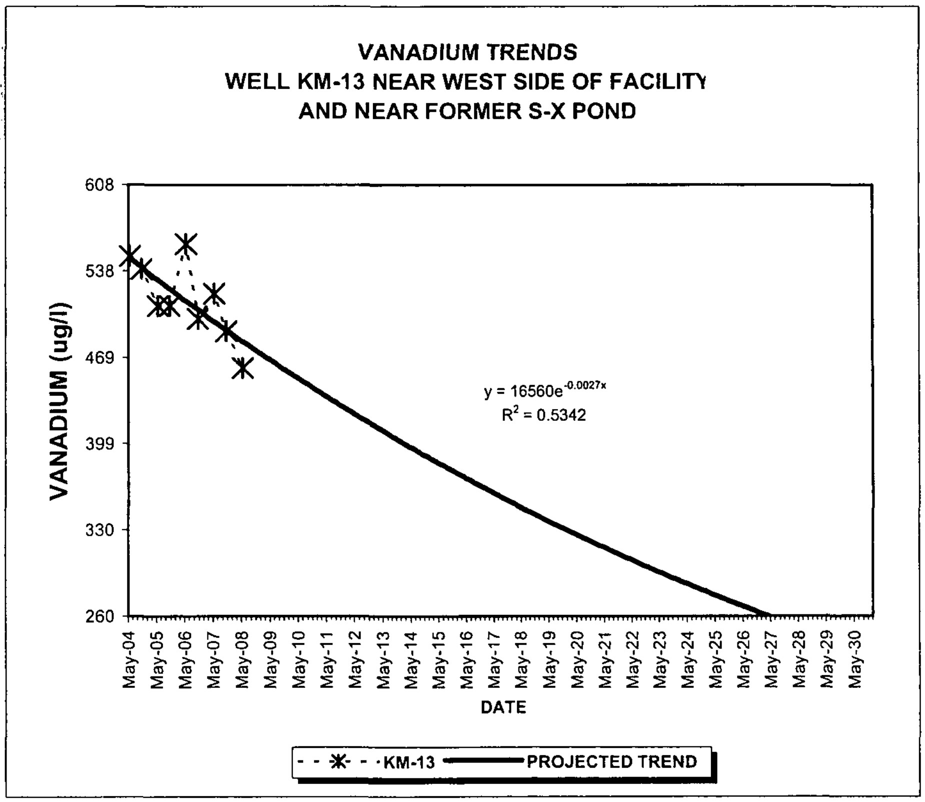
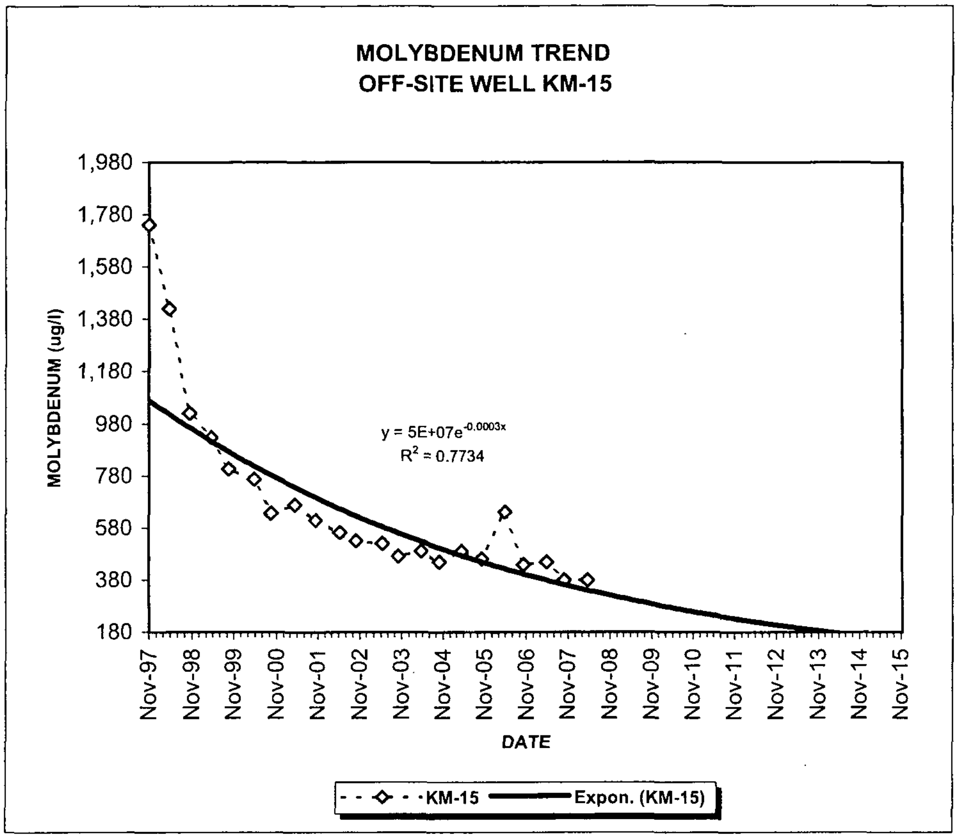


FIGURE C-41

RBC FOR VANADIUM IS 260 UG/L
KM-13 IS A POC WELL
PROJECTED TRENDS BASED ON OBSERVATIONS FOLLOWING REROUTING OF THE S-X STREAM

COC CONCENTRATIONS WITH TIME AND PROJECTED TRENDS



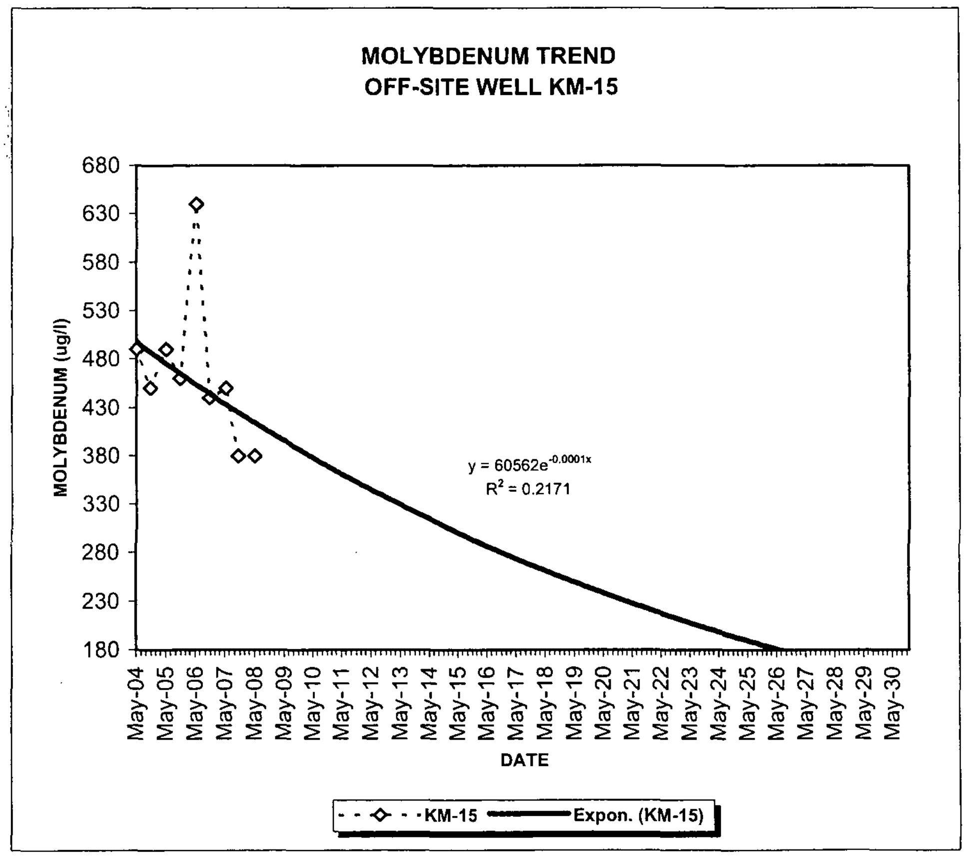
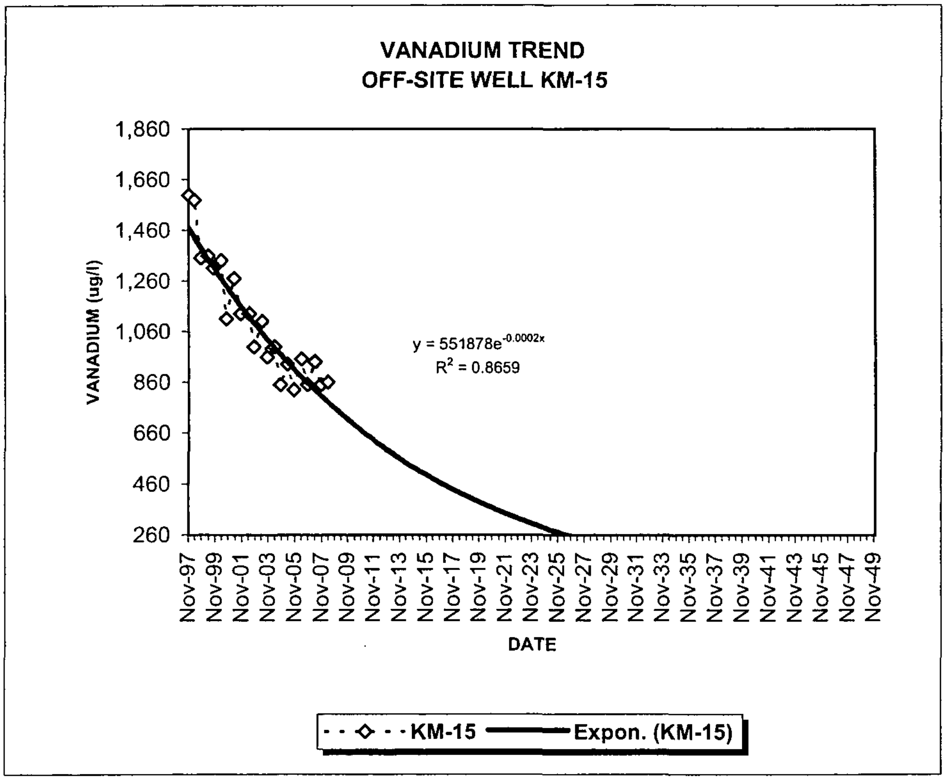


FIGURE C-42

RBC FOR MOLYBDENUM IS 180 UG/L

COC CONCENTRATIONS WITH TIME AND PROJECTED TRENDS



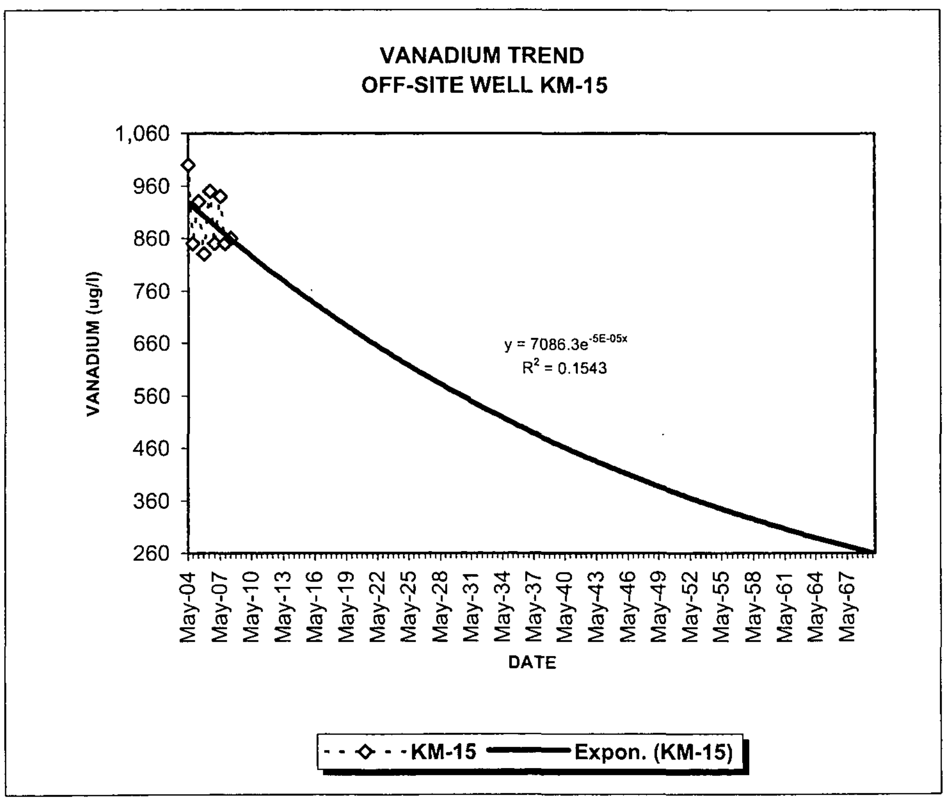
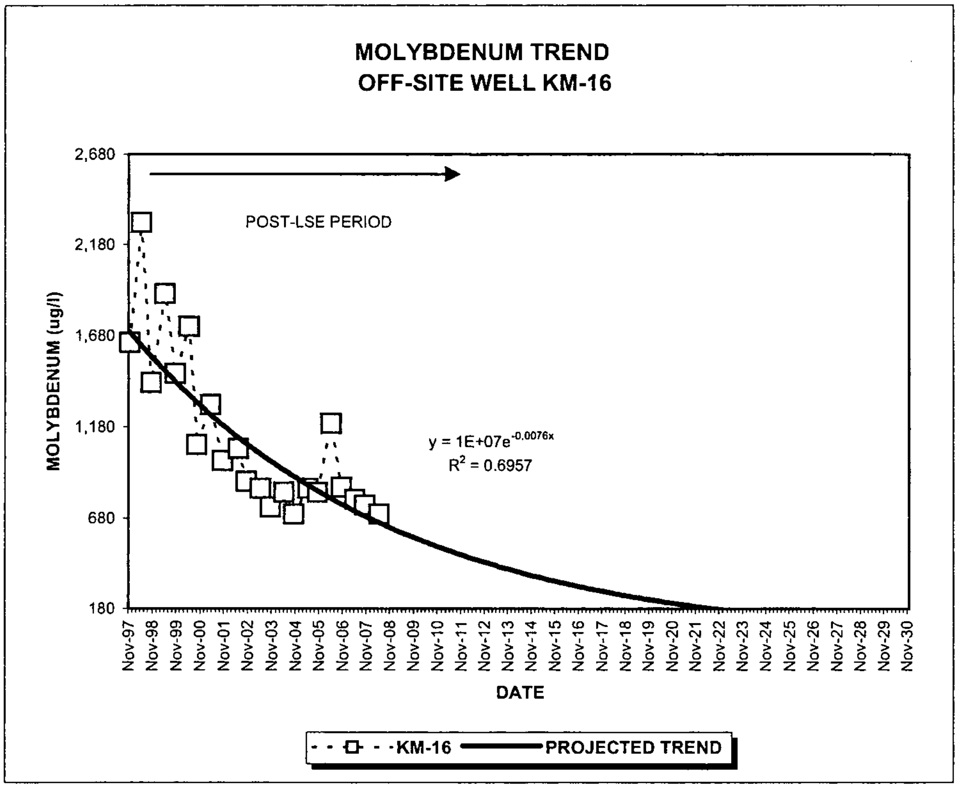


FIGURE C-43

COC CONCENTRATIONS WITH TIME AND PROJECTED TRENDS



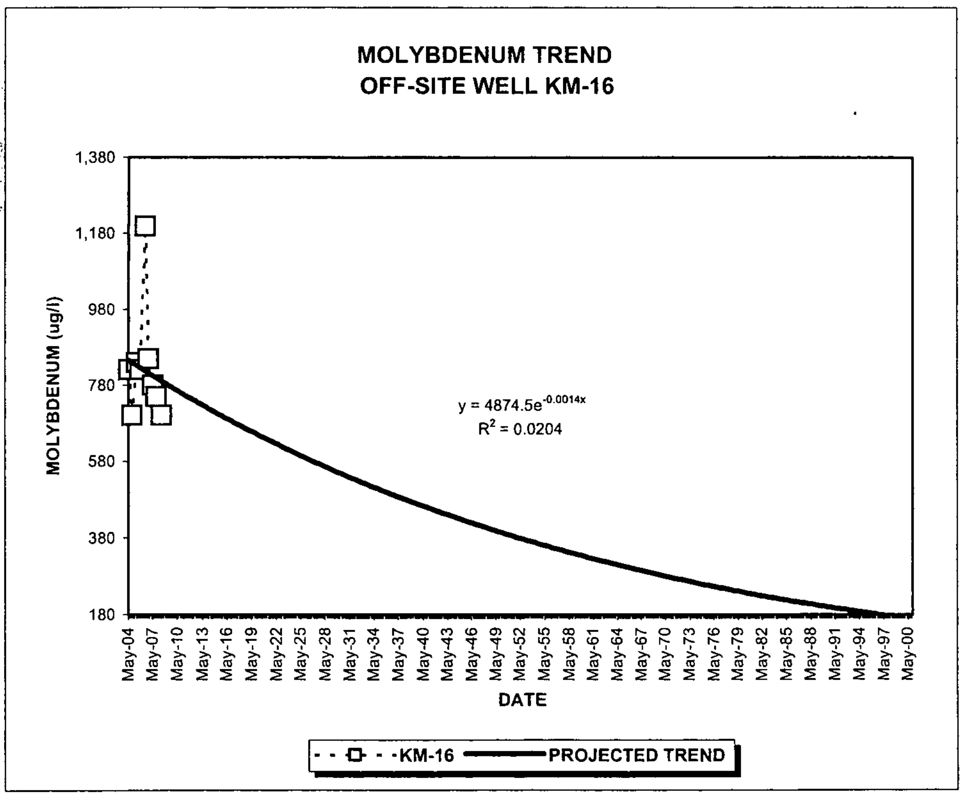
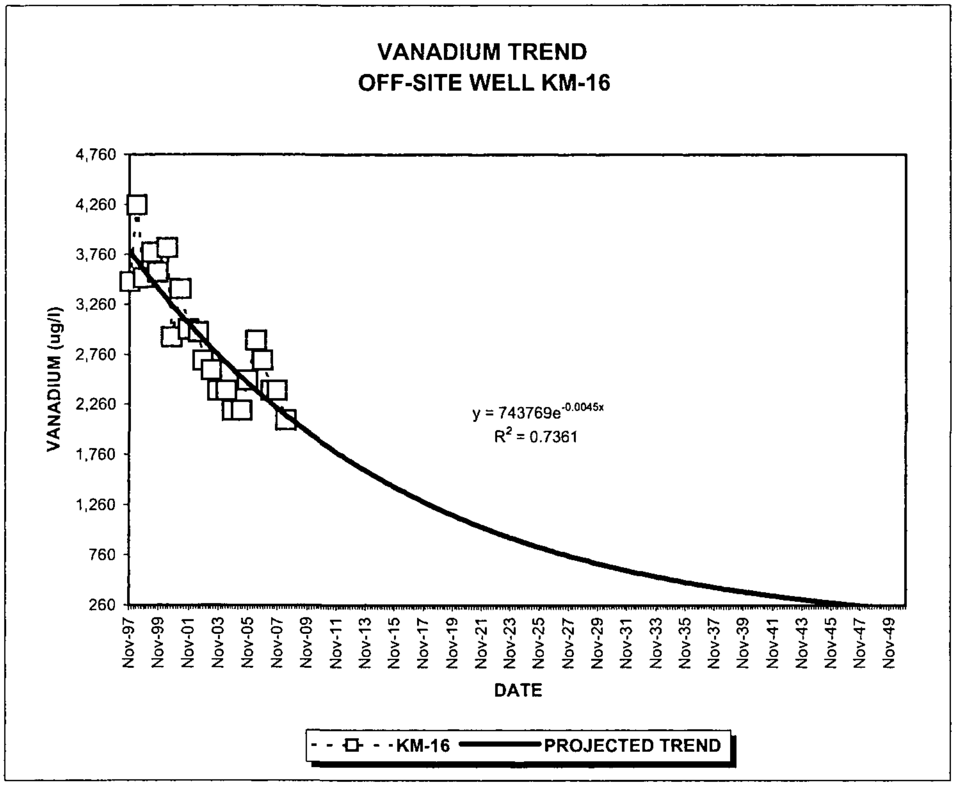


FIGURE C-44

PROJECTED TREND BASED ON OBSERVATIONS FOLLOWING COMPLETION OF LSE AND RECLAMATION

COC CONCENTRATIONS WITH TIME AND PROJECTED TRENDS



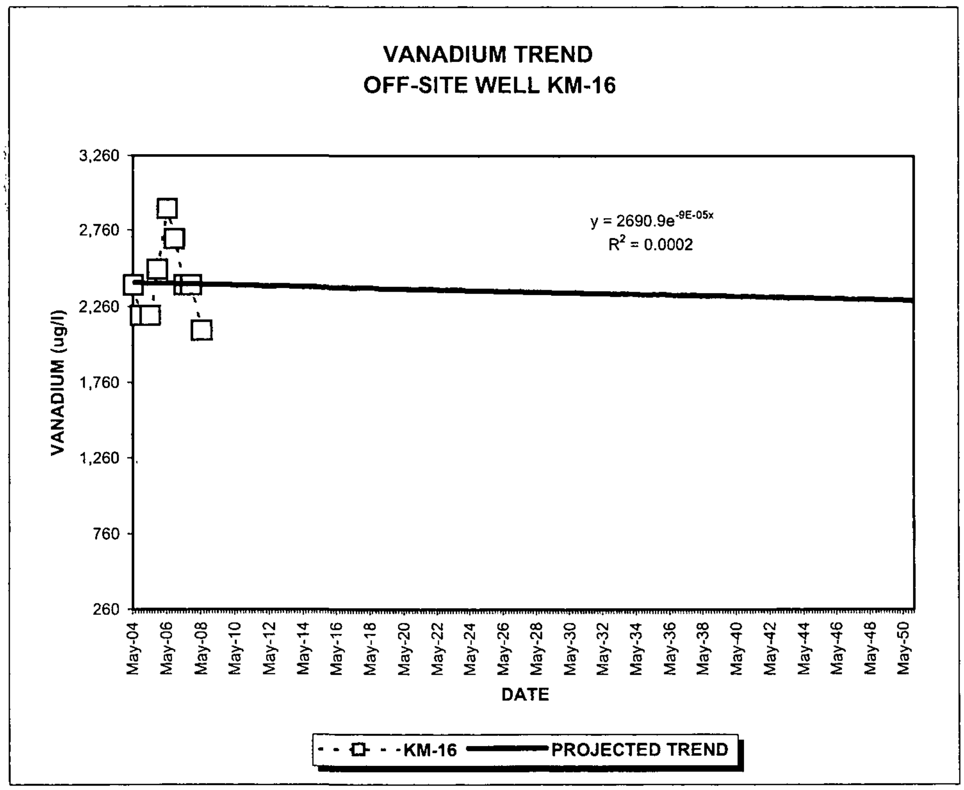
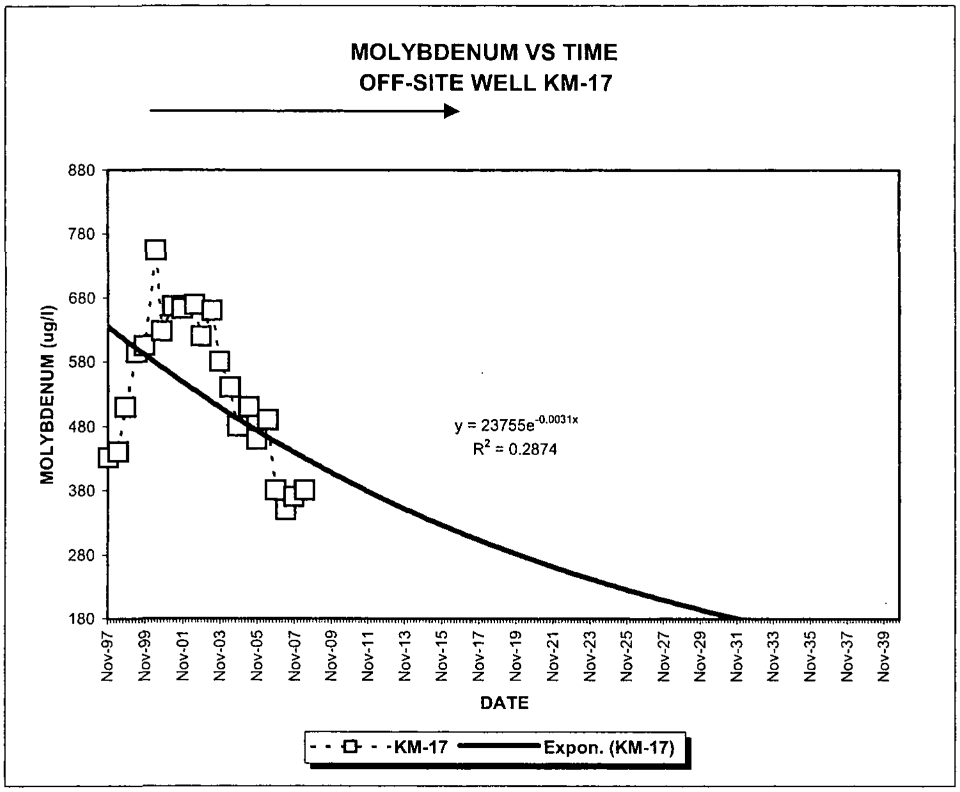


FIGURE C-45

RBC FOR VANADIUM IS 260 UG/L
PROJECTED TREND BASED ON OBSERVATIONS FOLLOWING
COMPLETION OF LSE AND RECLAMATION

COC CONCENTRATIONS WITH TIME AND PROJECTED TRENDS



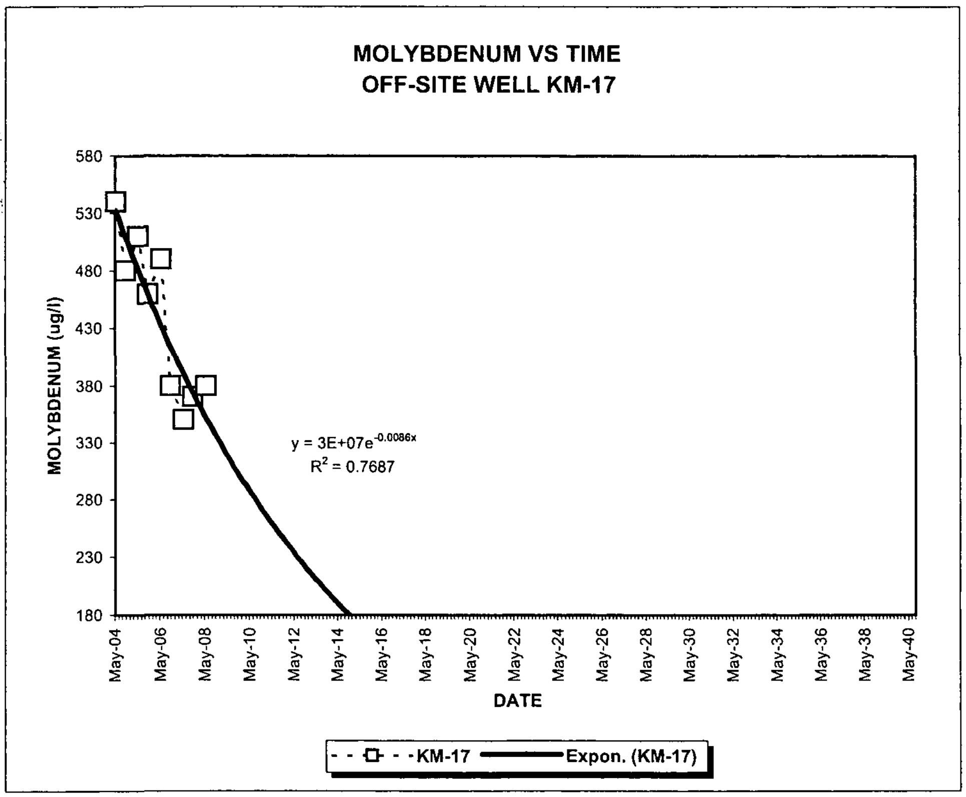
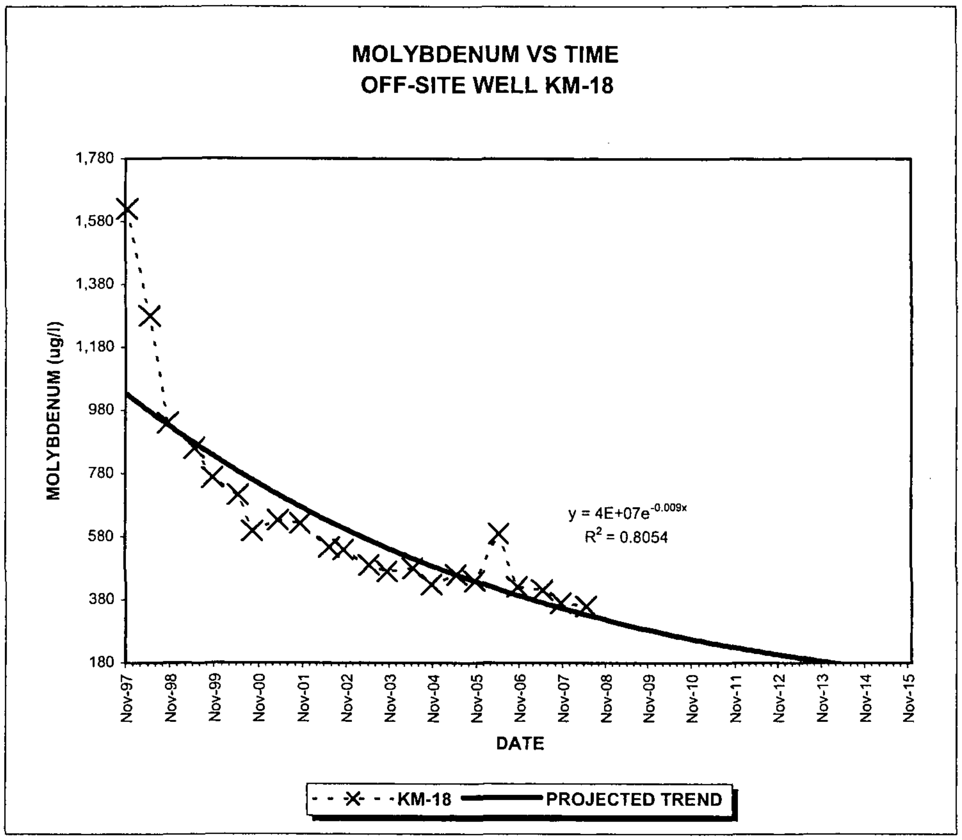


FIGURE C-46

RBC FOR MOLYBDENUM IS 180 UG/L
PROJECTED TREND BASED ON OBSERVATIONS FOLLOWING
COMPLETION OF LSE AND RECLAMATION

COC CONCENTRATIONS WITH TIME AND PROJECTED TRENDS



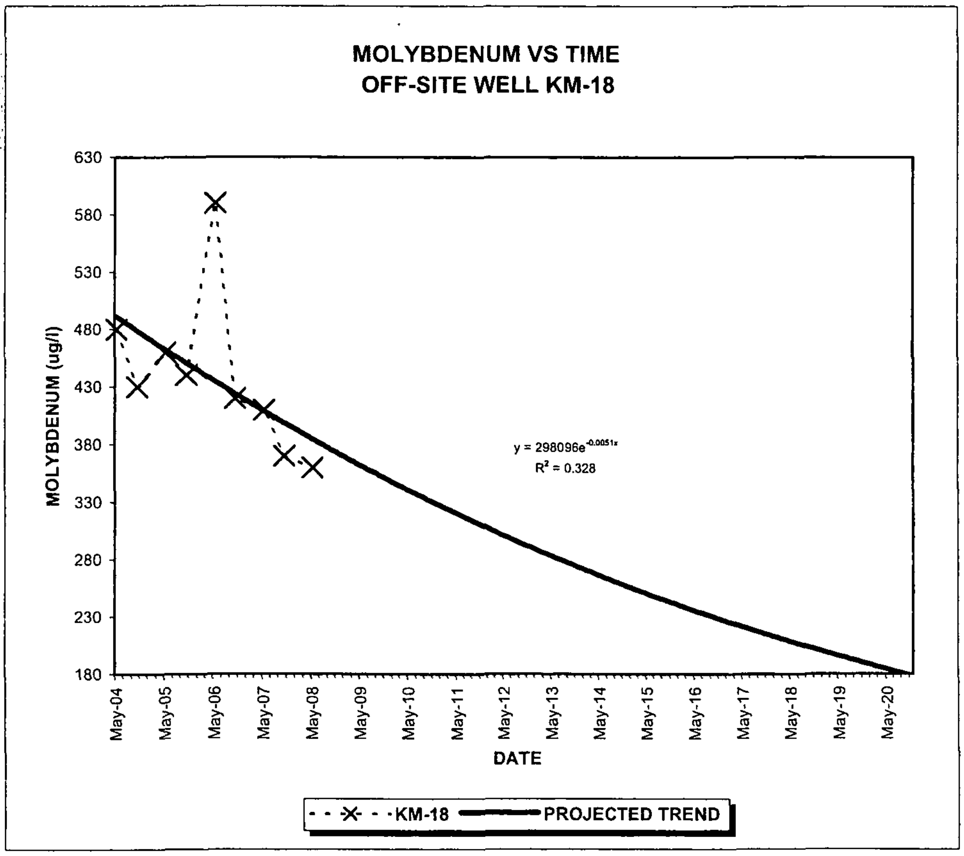
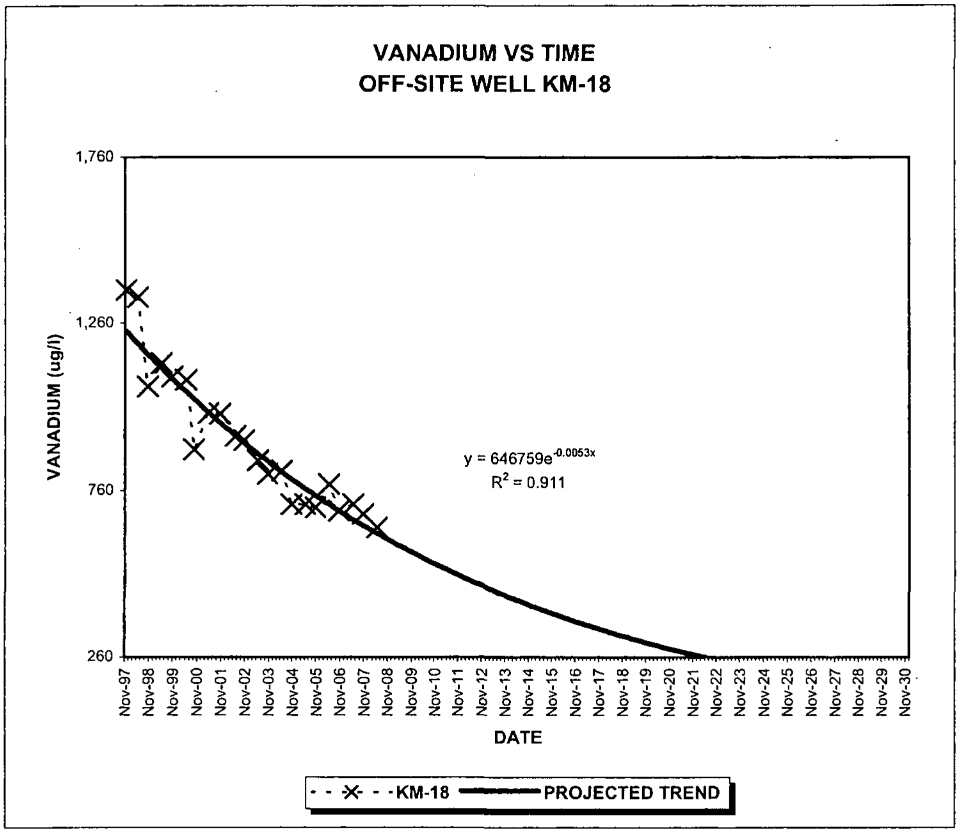


FIGURE C-47

RBC FOR MOLYBDENUM IS 180 UG/L

COC CONCENTRATIONS WITH TIME AND PROJECTED TRENDS



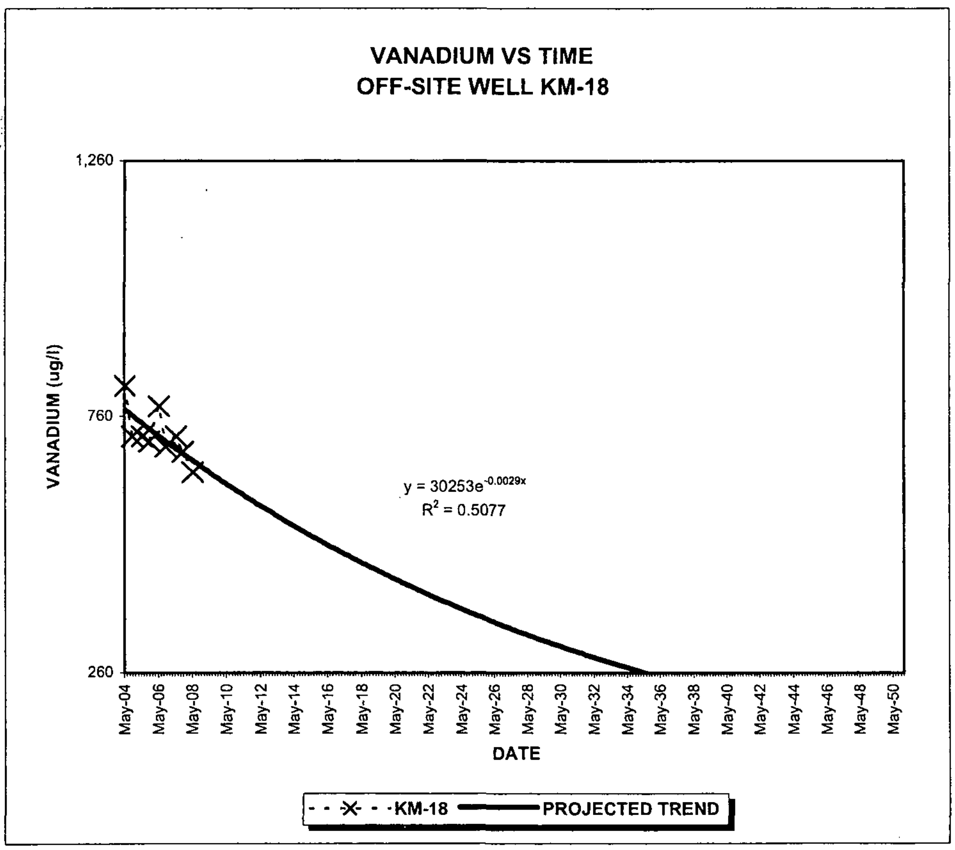
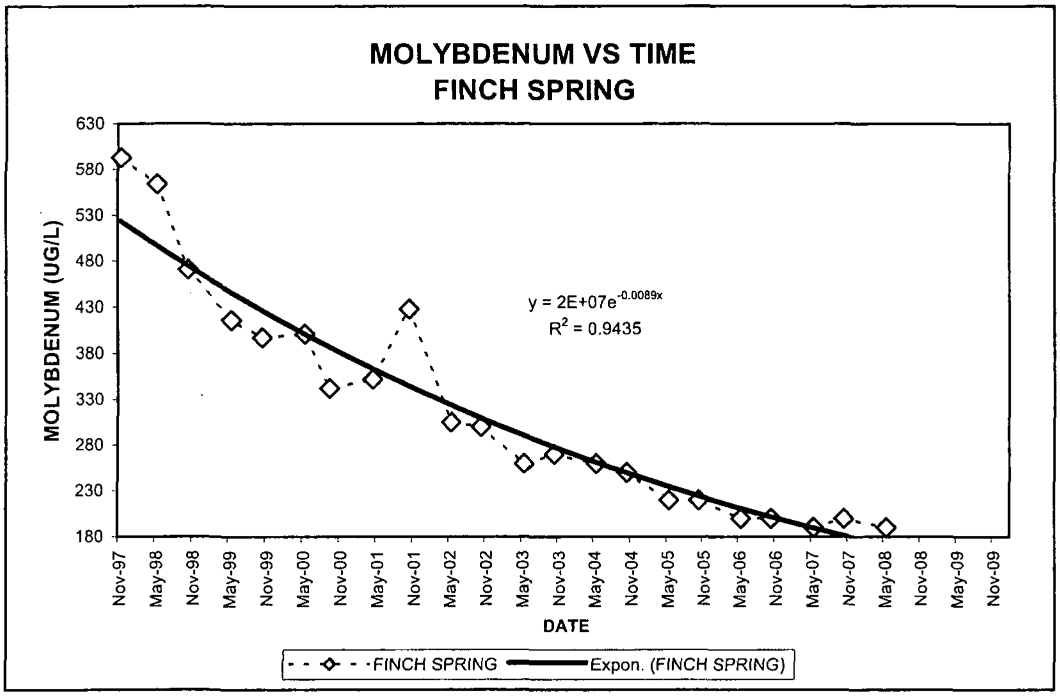


FIGURE C-48

RBC FOR VANADIUM IS 260 UG/L


MOLYBDENUM VS TIME
FINCH SPRING
MOLYBDENUM (UG/L)
630
580
530
480
430
380
330
280
230
180
Nov-97 May-98 Nov-98 May-99 Nov-99 May-00 Nov-00 May-01 Nov-01 May-02 Nov-02 May-03 Nov-03 May-04 Nov-04 May-05 Nov-05 May-06 Nov-06 May-07 Nov-07 May-08 Nov-08 May-09 Nov-09
DATE
y = 2E+07e^-0.0089x
R^2 = 0.9435
FINCH SPRING
Expon. (FINCH SPRING)

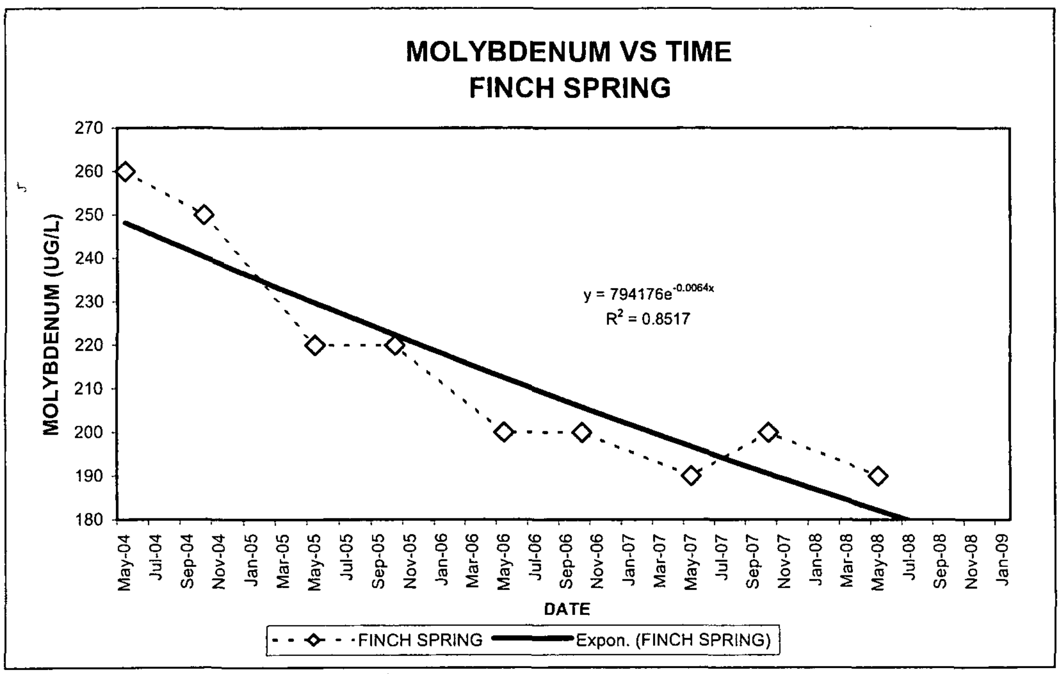
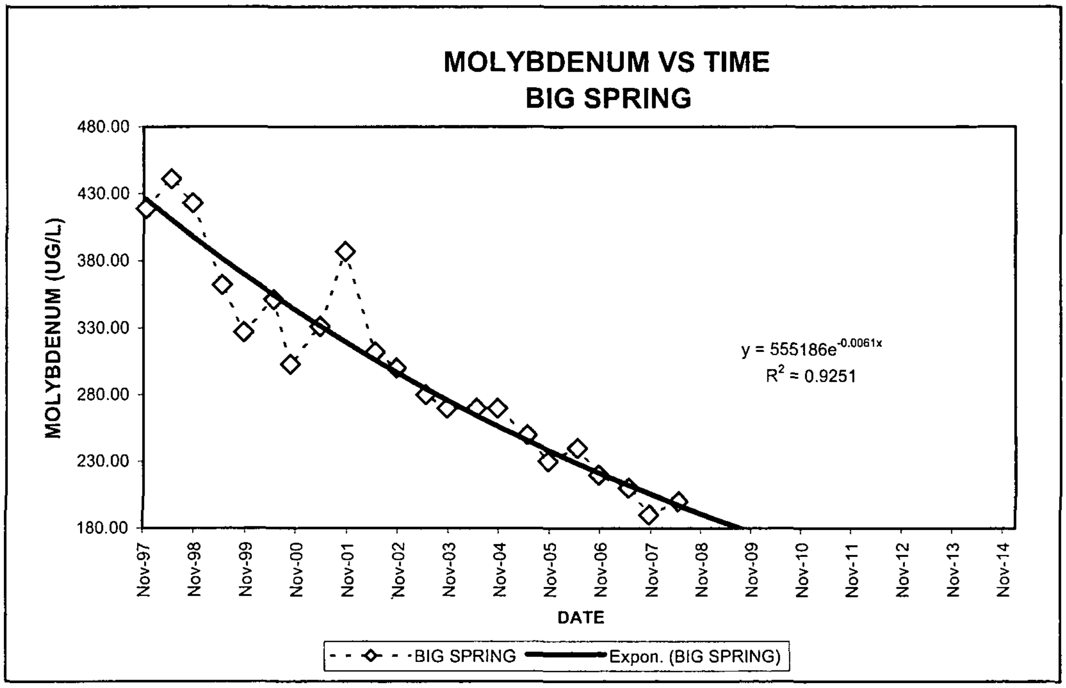

MOLYBDENUM VS TIME
FINCH SPRING
MOLYBDENUM (UG/L)
270
260
250
240
230
220
210
200
190
180
May-04 Jul-04 Sep-04 Nov-04 Jan-05 Mar-05 May-05 Jul-05 Sep-05 Nov-05 Jan-06 Mar-06 May-06 Jul-06 Sep-06 Nov-06 Jan-07 Mar-07 May-07 Jul-07 Sep-07 Nov-07 Jan-08 Mar-08 May-08 Jul-08 Sep-08 Nov-08 Jan-09
DATE
y = 794176e^-0.0064x
R^2 = 0.8517
FINCH SPRING
Expon. (FINCH SPRING)

FIGURE C-49


MOLYBDENUM VS TIME
BIG SPRING
MOLYBDENUM (UG/L)
480.00
430.00
380.00
330.00
280.00
230.00
180.00
Nov-97
Nov-98
Nov-99
Nov-00
Nov-01
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Nov-09
Nov-10
Nov-11
Nov-12
Nov-13
Nov-14
DATE
y = 555186e$^{-0.0061x}$
R^2 = 0.9251
BIG SPRING
Expon. (BIG SPRING)

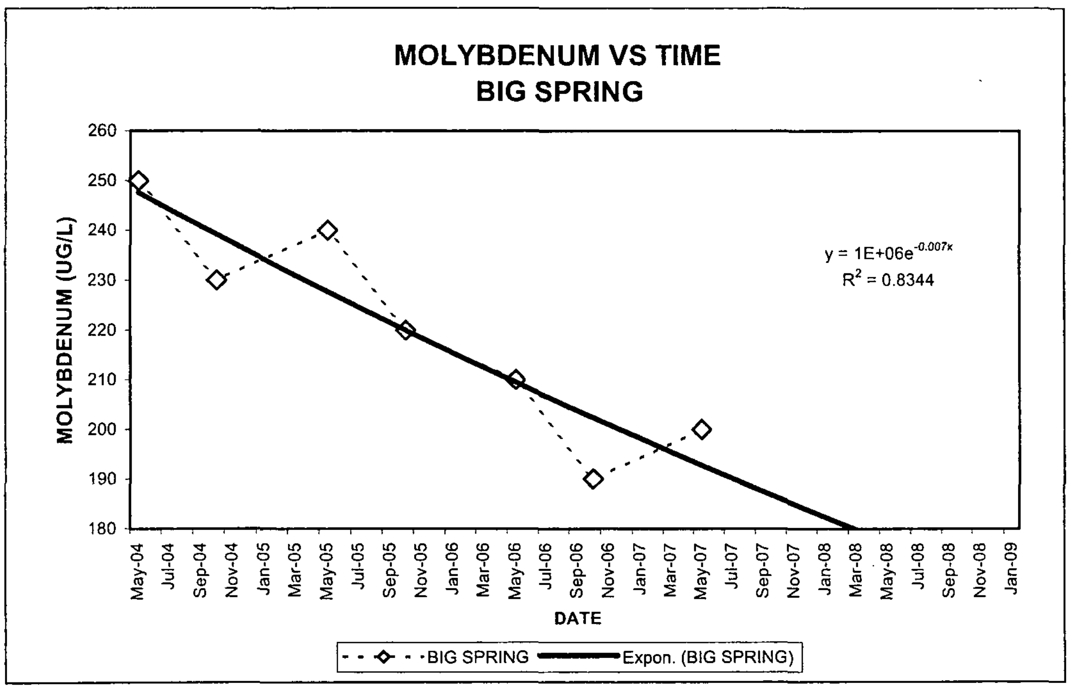

MOLYBDENUM VS TIME
BIG SPRING
MOLYBDENUM (UG/L)
260
250
240
230
220
210
200
190
180
May-04
Jul-04
Sep-04
Nov-04
Jan-05
Mar-05
May-05
Jul-05
Sep-05
Nov-05
Jan-06
Mar-06
May-06
Jul-06
Sep-06
Nov-06
Jan-07
Mar-07
May-07
Jul-07
Sep-07
Nov-07
Jan-08
Mar-08
May-08
Jul-08
Sep-08
Nov-08
Jan-09
DATE
y = 1E+06e$^{-0.007x}$
R^2 = 0.8344
BIG SPRING
Expon. (BIG SPRING)

FIGURE C-50